

# DISCOVER

Multidisciplinary

**Primary Three**  
**Second Term**

Name : .....

Class : .....

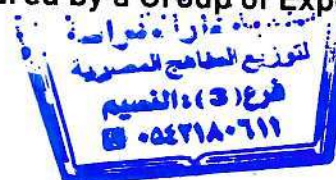
School : .....



Parents' Guide

2021

Prepared by a Group of Experts



# Theme 3: How the World Works

## Origins



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# Connections



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# CHAPTER 1

## "Patterns of Change"



### Chapter Overview



#### Discover:

- Students discover how they have grown and changed throughout their years in school.
- Students observe parents to consider origins of how we grow and change.
- Students observe inherited traits in themselves, then in animals and their offspring.



#### Learn:

- Students learn how inherited traits in plants and animals contribute to survival in various environments.
- Students analyze various plant and animal adaptations for survival, such as camouflage.
- Students explain how adaptations of external features contribute to survival.



#### Share:

- Students design, test, and modify bird beaks to investigate adaptations to different kinds of food available in different environments.



# Pacing Guide

Lesson

Instructional Focus

Key vocabulary

Discover

1

**Students will:**

- Define origin.
- Assess personal growth over time.
- Predict future changes (next year, five years, 10 years).

- Origin.
- Timeline.



2

- Compare and contrast parents and offspring.
- Describe inherited traits.

- Inheritance.
- Offspring.

**Students will:**

- Identify inherited characteristics in animals and plants.
- Explain how inherited traits affect an animal's appearance and survival.

- Inheritance.

3

- Explain how humans survive in different environments.

4

- Explain how plants adapt to an environment.
- Use historical information to trace adaptations in a water lily.

- Adaptation.

5

- Participate in a hands-on activity to better understand a specific adaptation.

6

- Explain how animals adapt to an environment.
- Reflect on and annotate an informational text.

7

- Explain the purpose of camouflage.
- Observe an environment to invent a new style of camouflage.

- Camouflage.

**Students will:**

- Investigate the advantages and disadvantages of adaptations.
- Simulate various bird beaks competing for different foods.
- Analyze simulation data to make conclusion.

8

- Design a bird beak for a specific food source using limited materials.
- Create original birdsongs using pitch, rhythm, melody, and tempo.

- Melody.
- Pitch.
- Rhythm.
- Tempo.

9

- Offer and seek feedback.
- Test and revise or improve designs.

10

Share





# Lesson 1

## Origin

### Activity 1 Read and learn:

Everything in life has a **beginning**. How the universe began & how humans came into beings, even animals and plants, this is called **Origins**. Could you give me other examples?

**Cultures** have origins.

**Sciences** have origins.

**Languages** have origins.

- **Parents' Tips: Activity (1):** Assist your child to read the conversation above, then discuss with him/her the word "origin" by giving other examples.
- **Aim:** Identify the word "Origin".
- **Subjects integration:**
  - **English:** Answer questions about the story.
  - **Economics and Applied sciences:** Analyze personal changes in knowledge, skills, or abilities associated with growth.
- **Life Skills:** Observation - Verbal communication.





## Vocabulary

**Activity 2** Look, then tick (✓):

**Vocabulary word: "Origin"**



- 1 Cultures have different origins.  
☐ Yes ☐ No
- 2 Sciences have different origins.  
☐ Yes ☐ No
- 3 The universe has a beginning.  
☐ Yes ☐ No



### Definition

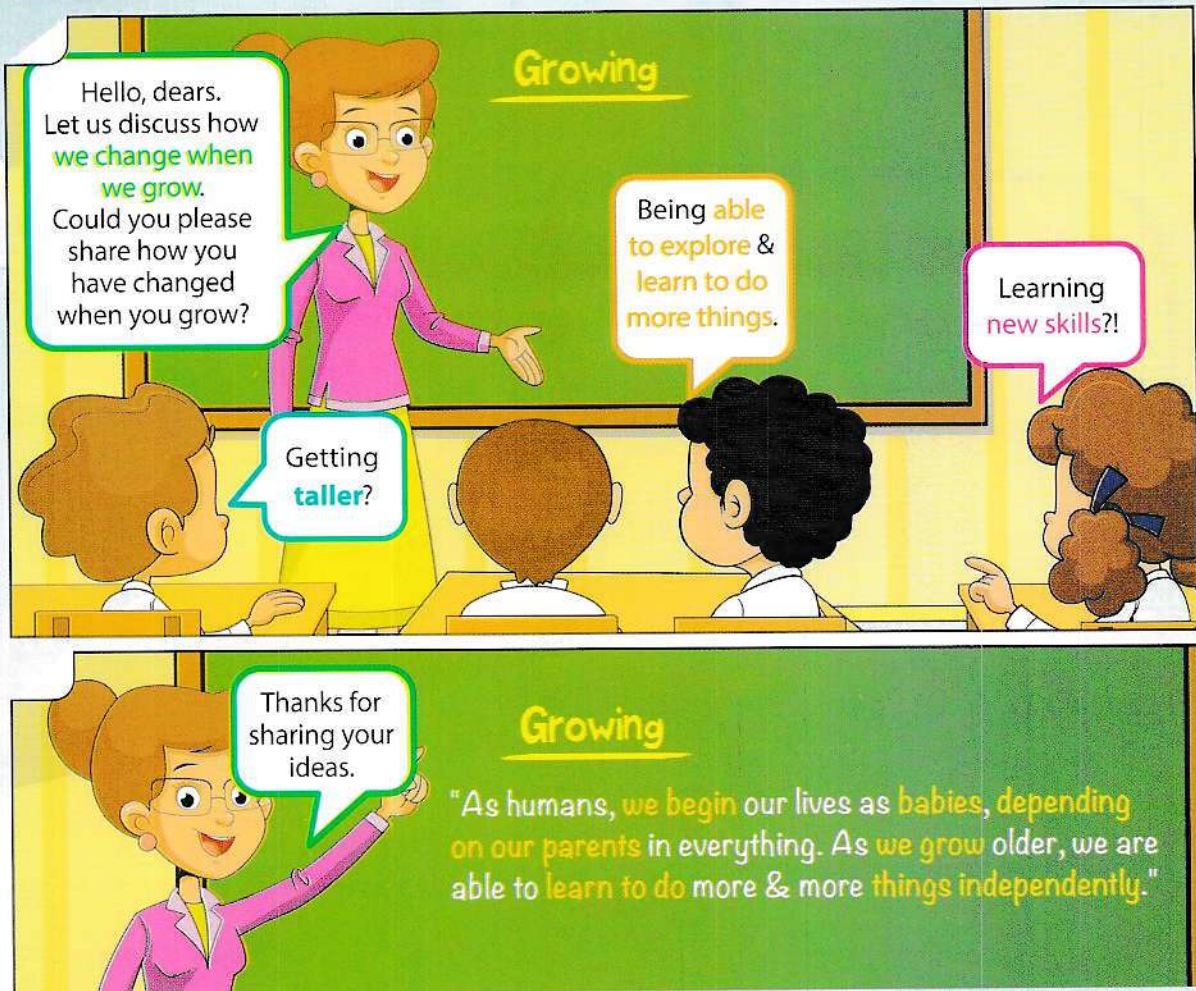
**Origin:** is the thing from which something comes, or the place where it started to exist.

- **Parents' Tips:** Activity (2): Help your child define the word "origin" by answering the given questions.
- **Aim:** Define, illustrate and use new vocabulary in a sentence.
- **Subjects integration:**
  - **English:** Define words and write complete sentences.
  - **Science:** Ask questions based on observations to find more information.
- **Life Skills:** Critical thinking - Communication.



# Sally & Ramy are Growing

## Activity 3 Read, then answer:



### Complete:

- 1 Humans begin their lives as .....
- 2 Babies ..... on their parents in everything.
- 3 As we grow, we are able to learn to do things .....

○ **Parents' Tips:** Activity (3): Share with your child how he/she has changed as he/she grows up to explore the meaning of the growing and its relation to developing new skills and abilities, then let him/her answer the questions.

○ **Aim:** Assess personal growth over time.





It's interesting to know that when we grow we change physically, develop new skills & abilities to practice new activities.



In fact, we are growing every day, mom told me that I started to take my first steps when I turned one year old, spoke my first words at 1.5 years, and when I turned 4 I started going to school and to the swimming trainings.

**Ask your parent about yourself while growing, then complete:**

- 1 I started talking when I was ..... year/s old.
- 2 I started walking when I was ..... year/s old.
- 3 I started school when I was ..... year/s old.
- 4 I started sports training when I was ..... year/s old.

**Tick (✓):**

\* I am able to .....

- |   |  |
|---|--|
| <input type="checkbox"/> swim                 | <input type="checkbox"/> ride a bike           |
| <input type="checkbox"/> drive a car          | <input type="checkbox"/> study                 |
| <input type="checkbox"/> eat independently    | <input type="checkbox"/> get dressed on my own |
| <input type="checkbox"/> walk to school alone | <input type="checkbox"/> do my own laundry     |



**Subjects integration:**

- English: Define words and write complete sentences.
- Science: Ask questions based on observations to find more information.
- Life Skills: Critical thinking – Communication.

# My Timeline

**Activity 4** Look at Sally's timeline showing the important abilities she gained while growing, then answer:

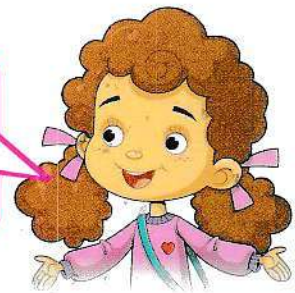


**Note:** Each mark on this timeline represents 1 year.

## Remember!!

**Timeline** is a tool that looks like a number line that we use to understand the order of events in history.

This timeline helped me to capture how I've grown and changed in the past years.

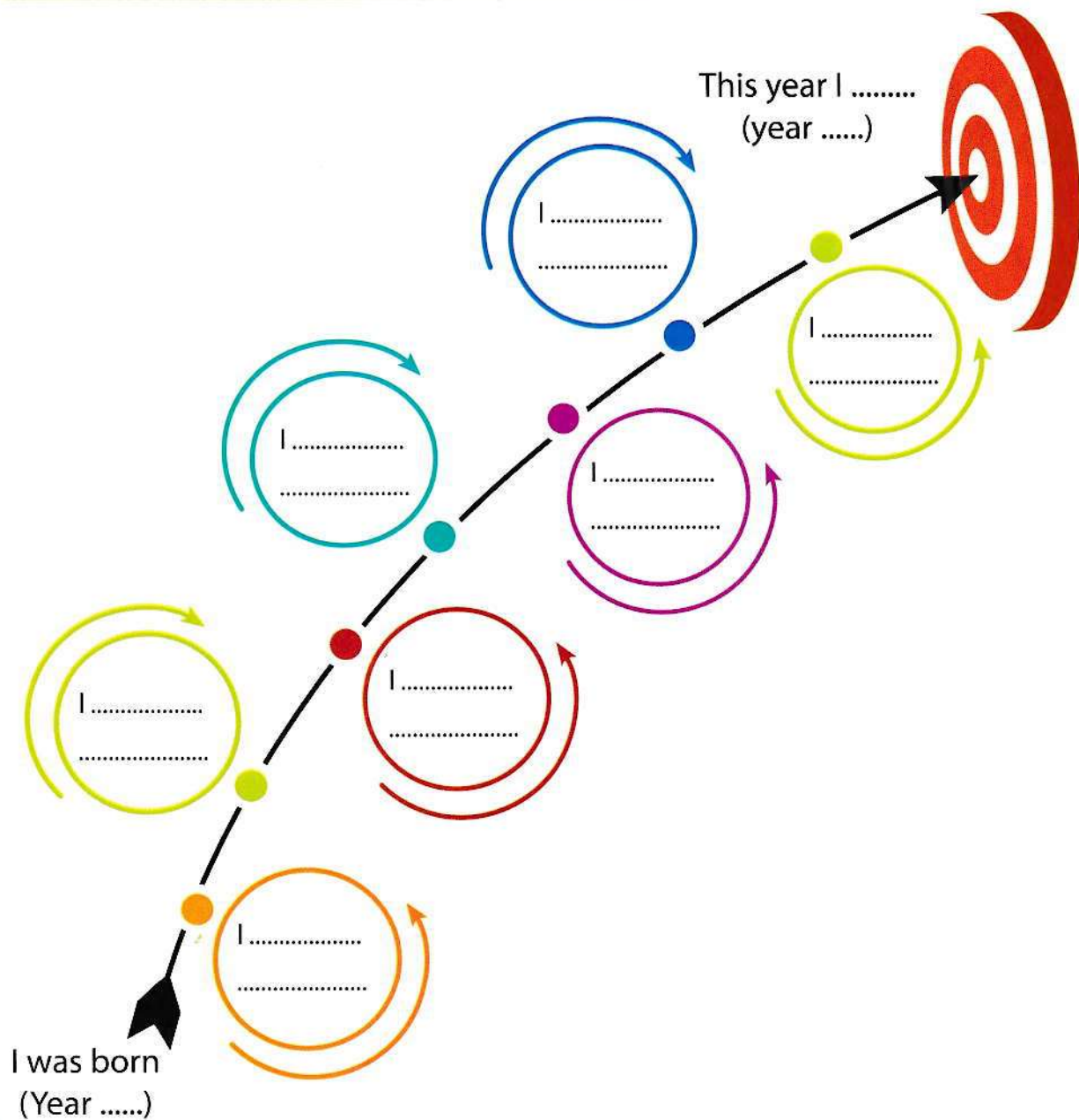


- **Parents' Tips: Activity (4):** Help your child observe Sally's timeline and understand the sequence of her growth & developing new skills & abilities in the past years, then let him/her design his/her own timeline.
- **Aim:** Assess personal growth over time.





From what you have learned from Sally's timeline, arrange the changes happened in your abilities while growing, then design your own timeline:



○ **Subjects integration:**

- **English:** Define words and write complete sentences.
- **Science:** Ask questions based on observations to find more information.
- **Social studies:** Explain the order of events using the timeline.

○ **Life Skills:** Critical thinking – Communication.





## Same but Different

### Activity 5

From the previous activity, compare your timeline with a friend, then tick (✓) if you are similar or different:

Points of comparison	We are similar	We are different
The year we were born	<input type="checkbox"/>	<input type="checkbox"/>
The age we started walking	<input type="checkbox"/>	<input type="checkbox"/>
The age we started	<input type="checkbox"/>	<input type="checkbox"/>
The age we	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>

✳ Do we all grow/change in the same way at the same time?

☐ Yes

☐ No

○ **Parents' Tips: Activity (5):** Help your child share his/her timeline with a friend and identify the similarities and differences between each other, then discuss with him/her what they concluded from this comparison.

○ **Aim:** Assess personal growth over time.

○ **Subjects integration:**

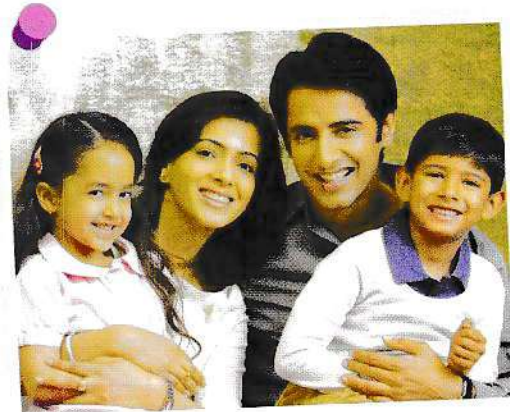
- **English:** Ask and answer questions to demonstrate understanding of a text.

- **Science:** Ask questions based on observations to find more information.

- **Social studies:** Compare the order of events using the timeline.

○ **Life Skills:** Critical thinking - Communication.



**Activity 6****Look at the pictures, then answer:**

★ Do you think all the four families came from one origin?

☐ Yes

☐ No

Why...?

.....

- **Parents' Tips: Activity (6):** Help your child look at the given pictures and compare the similarities and differences between groups, then let him/her identify if all these families have the same origin or not, with giving reasons for his/her choice.
- **Aim:** Compare and contrast similarities and differences between groups.
- **Subjects integration:**
  - **English:** Ask and answer questions to demonstrate understanding of a text.
  - **Science:** Ask questions based on observations to find more information.
- **Life Skills:** Critical thinking – Communication.



# Lesson 2

## Traits

### Activity 1 Read and learn, then answer:

Our abilities change as we grow but there are characteristics that can't be changed like for example our height, we can't decide how tall we want to be, this is called a "Trait". So, what other traits do we have?

Eye color.

Hair color?!

Height.

Nose shape.

Well!  
All these traits are inherited from our parents & grandparents. Could you please share with us your inherited traits?!

I have blue eyes like my grandma.

I have dark hair like my mom.

I'm tall like my dad.

I have a tiny nose like my aunt.

#### Inherited traits

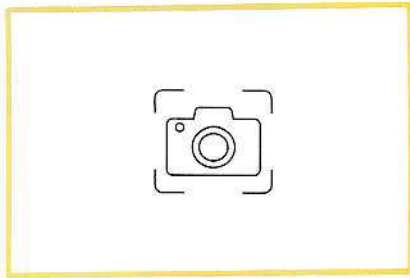
**Search about more inherited traits that we can't change.**

- **Parents' Tips: Activity (1):** Discuss with your child the inherited traits that transfer from parents to their siblings like height, nose shape, hair color, then let him/her answer the questions.
- **Aim:** Describe inherited traits.

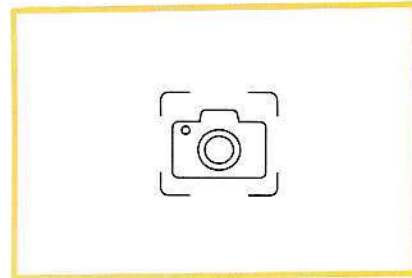




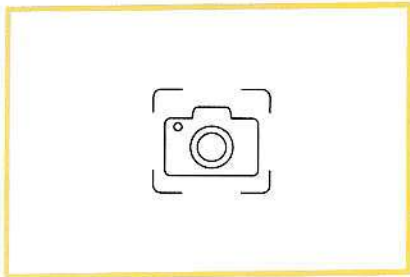
**Stick a picture for yourself, your parent & your sibling;  
and notice the similarities and differences in your  
inherited traits, then tick (✓):**



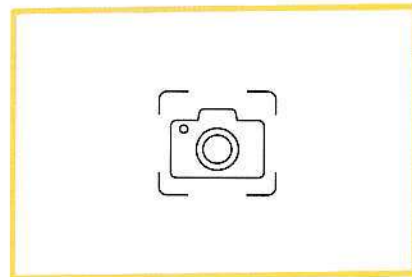
**My picture**



.....



.....



.....

**1** Do you have similar inherited traits?

☐ Yes

☐ No

**2** Do you have different inherited traits?

☐ Yes

☐ No

**3** Do all kids have the same eye color, hair color, height or face shape like their parents?

☐ Yes

☐ No

○ **Subjects integration:**

- **English:** Ask and answer questions to demonstrate understanding of a text.
- **Science:** Identify patterns of inherited characteristics in offspring, focusing on external traits and their functions.

○ **Life Skills:** Verbal communication.





## Litter of Kittens

### Activity

2

Read & understand, then underline the "inherited traits" with **green** & the "non-inherited traits" with **red**, then answer:

Have you ever seen a **litter** of kittens? A litter usually has between 2 to 5 kittens of the same parents. These kittens look like their parents, but not identical.



Their fur or eye color is a **trait**, some kittens **inherit** fur color as their mother & other kittens as their father.

Each kitten in the litter **receives some traits from its mother & other traits from its father**. So, each kitten receives a **combination of different traits** from their **parents**, and that's why kittens in a litter can look similar but not exactly the same.

Kittens can develop some traits as they grow in their environment. For example, a kitten's claws can be removed, yet this trait is **not inherited** to its own **offspring** when it grows.

**Traits:** are the characteristics that make an organism look & behave the way it does.

**Offspring:** is the newly produced individual. (ex: you are an offspring of your parent.)

- **Parents' Tips: Activity (2):** Assist your child to read and understand the above passage, then help him/her extract the information from the passage and underline the "inherited traits" with green and the "non-inherited traits" with red and let him/her answer the following questions.
- **Aim:** Describe inherited traits.





From the previous passage, write the underlined traits in the table:

Inherited traits	Non-inherited traits
-----	-----
-----	-----
-----	-----

**Complete:**

- 1 A group of 2-5 kittens is called a/an .....
- 2 Kittens' fur color is a/an ..... trait, while the kittens' removed claws is a/an ..... trait.
- 3 The organism (individual) that can produce more of its kind is called a/an .....



○ **Subjects integration:**

- **English:** Ask and answer questions to demonstrate understanding of a text.
- **Science:** Identify patterns of inherited characteristics in offspring, focusing on external traits and their functions.

- **Life Skills:** Verbal communication.





## Vocabulary

**Activity 3** Look, then tick (✓):

**Vocabulary word: "Inheritance"**



- 1 Offsprings look identical to their parents.  
☐ Yes ☐ No
- 2 Removing kitten's claws is a non-inherited trait.  
☐ Yes ☐ No
- 3 Offsprings inherit traits from their mothers only.  
☐ Yes ☐ No



### Definition

**Inheritance:** is the passing down of information (characteristics) from the parents to the offsprings.

- **Parents' Tips:** Activity (3): Help your child define the word "Inheritance" by answering the given questions.
- **Aim:** Define, illustrate and use new vocabulary in a sentence.
- **Subjects integration:**
  - **English:** Define words and write complete sentences.
  - **Science:** Ask questions based on observations to find more information.
- **Life Skills:** Critical thinking - Communication.





## Feline Parents & Offsprings

### Activity 4

Using your critical thinking skill, match each Feline offspring to its parent:

#### Note:

Felines are type of cats, they have similar features.

#### Parent



"Jaguar"



"Cougar"



"Stripped cat"



"Lynx"

#### Offspring



Search to know more about different kinds (species) of Feline animal.

- **Parents' Tips: Activity (4):** Help your child look at the pictures and think to match each feline offspring to its parent, then let him/her search to know more about different kinds of feline animal.
- **Aim:** Compare and contrast parents and offspring.
- **Subjects integration:**
  - **English:** Ask and answer questions to demonstrate understanding of a text.
  - **Science:** Compare characteristics of parents and offspring in animals, not including humans.
- **Life Skills:** Critical thinking - Communication.



# Lesson 3

## Parents & Offsprings

### Activity 1

Read, and highlight the inherited traits & their facts, then answer:



All offsprings are similar to their parents. Young zebras have stripes & eat grasses like their parents.

The pattern of stripes on the zebras bodies is a trait, but each individual stripes has a unique pattern.

These stripes help zebras to survive as they confuse some bugs eyesight, and prevent them from biting the zebras, which can make them sick.

Another trait in zebras is that they have strong, large teeth that help them bite off & break down tough grasses found in their habitat.



### Answer:

1 What are the inherited traits in "zebras"?

.....

2 How does the zebras' pattern of stripes help them survive?

.....

- **Parents' Tips: Activity (1):** Assist your child to read and understand that all offspring are similar to their parents, then let him/her highlight the "inherited traits" in zebras that help them survive, and answer the questions.
- **Aim:** Explain how inherited traits affect an animal's appearance and survival.
- **Subjects integration:**
  - **English:** Ask and answer questions to demonstrate understanding of a text.
  - **Science:** Identify patterns of inherited characteristics in offspring, focusing on external traits and their functions.
- **Life Skills:** Critical thinking - Communication - Understanding relationships.





## Double Entry Journal

### Activity 2

From your previous reading, record the important facts you highlighted, then write what you think about each:

Facts	I think
Stripes help zebras survive.	



- **Parents' Tips: Activity (2):** Help your child record the important facts he/she highlighted from his/her previous reading, then let him/her write the facts and how he/she thinks about each.
- **Aim:** Explain how inherited traits affect an animal's appearance and survival.
- **Subjects integration:**
  - **English:** Ask and answer questions to demonstrate understanding of a text.
  - **Science:** Identify patterns of inherited characteristics in offspring, focusing on external traits and their functions.
- **Life Skills:** Critical thinking - Communication.



## Help me Survive

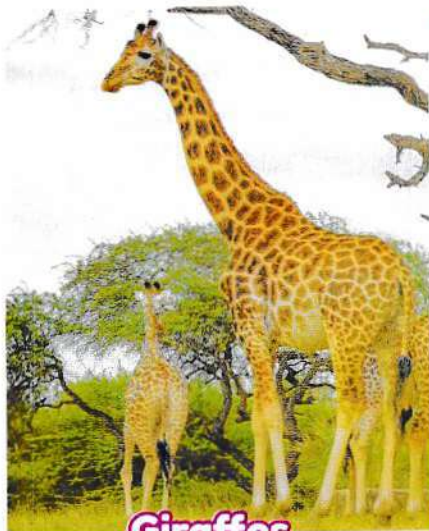


We previously learned that, living organisms must meet their basic needs (air, food, water and shelter) to survive. Let us discover how some traits can also help in their survival.

### Activity

3

Look at the pictures, and search about inherited traits that help these animals to survive, then answer:



**Giraffes**

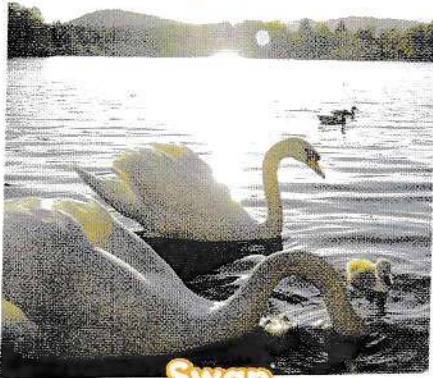
- a What trait/s did the offspring inherit?  
Long neck, long legs and colored pattern.
- b Mention one trait and its importance for survival.  
Long neck allows giraffes to access food.
- c What would happen if this trait wasn't inherited?  
Giraffes would struggle to survive.



**Search about the importance of long legs, and color pattern to giraffes to survive.**

- **Parents' Tips: Activity (3):** Discuss with your child that some inherited traits help living organisms survive, then assist him/her search on the internet about the inherited traits that help these animals survive and answer the given questions.
- **Aim:** Explain how traits affect an animal's survival.

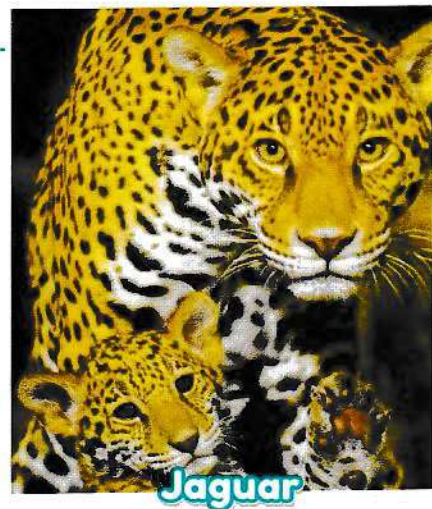




Swan

- What trait/s did the offspring inherit?  
.....
- Mention one trait and its importance for survival.  
.....
- What would happen if this trait wasn't inherited?  
.....

- What trait/s did the offspring inherit?  
.....
- Mention one trait and its importance for survival.  
.....
- What would happen if this trait wasn't inherited?  
.....



Jaguar



○ **Subjects integration:**

- **English:** Ask and answer questions to demonstrate understanding of a text.
- **Science:** Identify patterns of inherited characteristics in offspring, focusing on external traits and their functions.

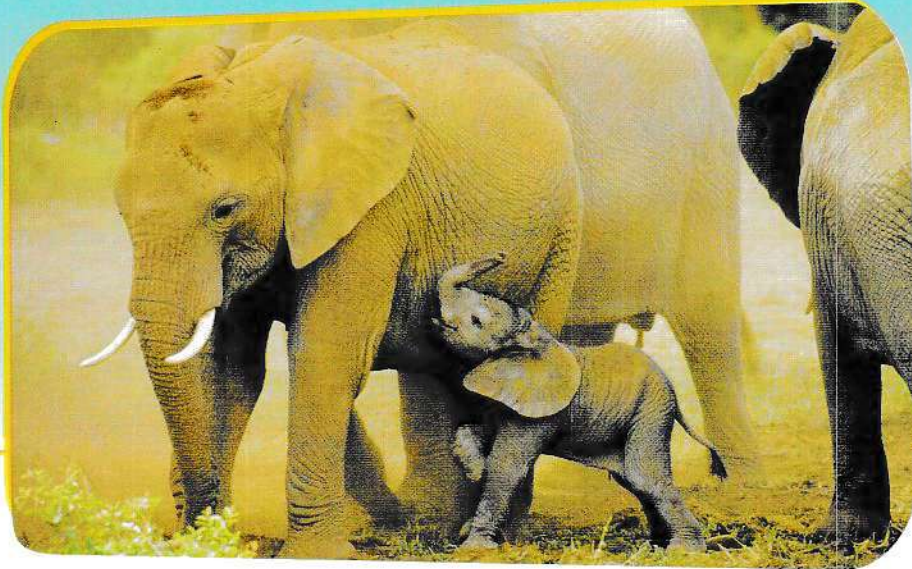
- **Life Skills:** Critical thinking - Communication - Understanding relationships.





## What I think & my Evidence

**Activity 4** Read about "Elephants", then answer:



Elephants are the largest mammals on land. They live in tropical regions where the weather is extremely hot.

They have large, thin ears used to help cool them down. Elephants also have powerful trunks to lift-up food high up on branches, suck up water to drink, and make sounds to communicate with others to warn the herd about danger.

They also have tusks protecting their trunks, and help them dig for food & water.

Although they have no natural predators due to their large size, but their young are easily preyed.

Sadly, the biggest threat to elephants are humans, as they hunt them for their tusks (ivory).

- **Parents' Tips: Activity (4):** Assist your child to read and understand the above passage about elephants, then help him/her extract the information from the passage and answer the given questions.
- **Aim:** Explain how inherited traits affect an animal's appearance and survival.





**From your reading & observing the adult & offspring picture, answer:**

**1** Where do elephants live?

.....

.....

.....

**2** What are the common traits between the adult & offspring elephants?

.....

.....

.....

**3** Explain why parents & offsprings look alike in some ways but different in others.

.....

.....

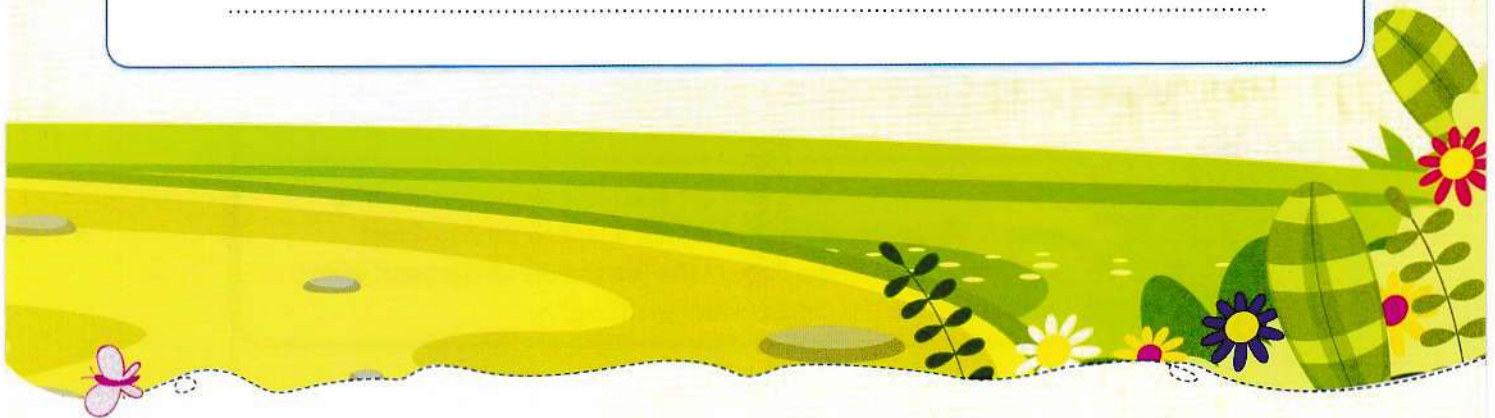
.....

**4** What are the important inherited traits that help elephants to survive?

.....

.....

.....



○ **Subjects integration:**

- **English:** Ask and answer questions to demonstrate understanding of a text.
- **Science:** Identify patterns of inherited characteristics in offspring, focusing on external traits and their functions.

○ **Life Skills:** Critical thinking - Communication - Observation.



# Lesson 4

## Planning my Story

### Activity

Read & learn, then answer:

Hello, Ramy!  
How was your day at school?

Hello, dad! It was interesting! our teacher discussed with us how **we have advantages over animals** as we can change the environment around us to survive & feel comfortable.

Yes, dear.. Humans, are blessed with such an advantage, and that's why we can live in many different environments across the world, while most animals live in specific regions.

Exactly, and she asked us, "How humans survived during floods?" That we previously learned about, and I answered by building barriers.



And by the end of the class, the teacher assigned us to write a story about "How a human could adapt to survive & feel comfortable if he/she lived in the North Pole all the year" with respect to the "Elements of story writing."

- **Parents' Tips:** Assist your child to read the conversation between Ramy and his dad to understand how humans have an advantage over animals as they can adapt in different environments to survive and stay comfortable, then let him/her help Ramy write his story with respect to the given elements of story writing.
- **Aim:** Know how to write a story.



**Elements of story writing:**

1. Who are the characters?
2. A clear setting "Where? & When?"
3. "If there is a problem in the story, how does it get resolved?"
4. Use the steps of "Writing process".

**Remember!!****"Steps of writing process":**

1. Brainstorming (plan)
2. Drafting.
3. Reviewing.
4. Publishing.

**Help Ramy plan (brainstorm) the story:****Character/s?!**

.....

.....

**Settings**

North Pole

All the year

**What is the problem?**

The extreme cold weather

**How is the problem solved?**

.....

.....

**Beginning**

.....

.....

.....

.....

.....

**Middle**

.....

.....

.....

.....

.....

**End**

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.....

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.....

.....

**Subjects integration:**

- **English:** Ask and answer questions to demonstrate understanding of a text.
- **Science:** Identify how humans survive in different environments.
- **Life Skills:** Verbal communication - Creativity.





**Help Ramy write a draft, then review and publish the story:**

**Draft**



.....

.....

.....

.....

.....

.....

.....

**Review**



.....

.....

.....

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.....

.....

.....

○ **Parents' Tips:** Assist your child to draft and review the story he/she helped Ramy to write.





Publish



Story title

.....

.....

.....

.....

.....

.....

.....



○ Parents' Tips: Assist your child to publish the story he/she helped Rami to write.



# Lesson 5

## Acacia Tree & Water Lily

### Activity 1

Read the given diagram and underline the traits that helped these plants to survive, then answer:

#### A) Acacia Tree:

Lives in the desert (hot & dry).

#### Trunk

- Is **short** and **splits into 2-3 main trunks** just above the ground.
- The tree **spreads wide** instead of growing tall.

#### Roots

- Are **very long** so they can help **to reach the underground water**.

#### Leaves

- Grow at the top of the branches & **spread out wide** in the shape of **umbrella**.
- The branches have **thorns** to prevent animals from eating its leaves.



#### Complete:

- 1 Acacia tree has ..... trunks and ..... roots.
- 2 Acacia tree spreads ..... instead of growing tall.
- 3 Acacia tree leaves grow at ..... and spread out in the shape of .....

- Parents' Tips: Activity (1): Assist your child to look at the pictures and read the texts and identify the traits that helped acacia tree and water lily to survive and adapt in their environments, then let him/her answer the given questions.
- Aim: Explain how plants adapt to their environment.





## B) Water lily (lotus): Lives in fresh water (ex: rivers).

### Stem

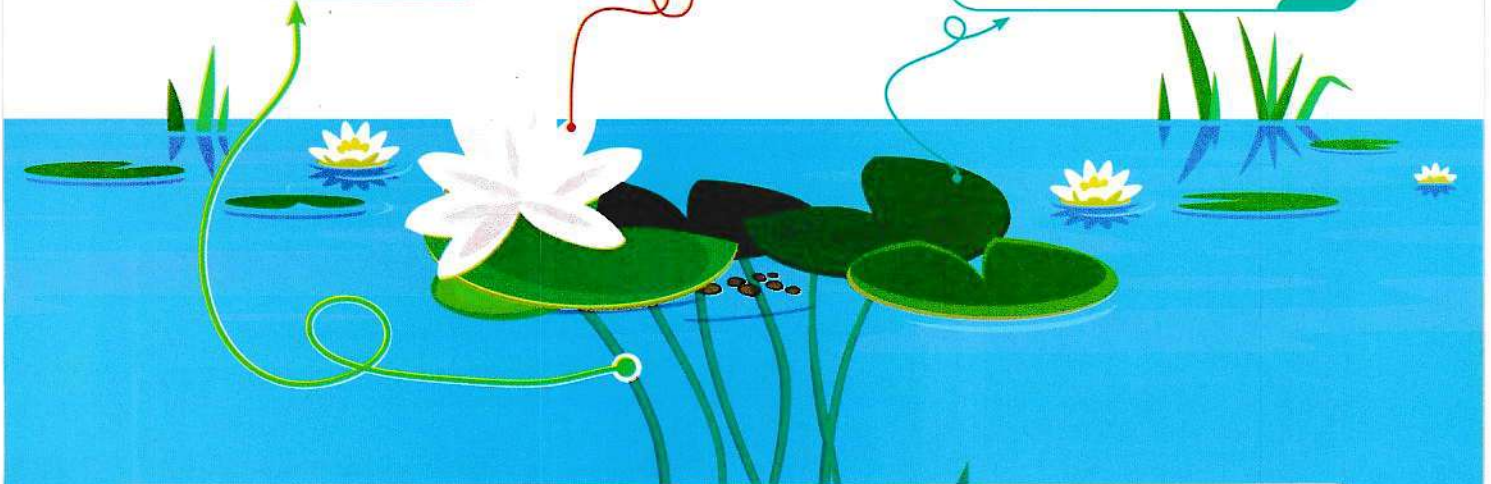
- It is **too long & flexible** to **fix** (anchor) the **plant** in the **mud** at the bottom of the water.

### Flowers

- Are **large colorful petals** in the shape of **rounded triangles**.
- They open few hours during the morning.

### Leaves

- Are **large rounded** to float on water surface & **attract sunlight**.
- Leaf **upper surface** is covered with **wax** to **keep water out**.
- Leaf **lower surface** has **thorns** to **protect it** from fish and other organisms from eating it.



### Complete:

- 1 Upper surface of water lily leaf is covered with ..... to keep water out, while lower surface has ..... for protection.
- 2 Water lily stem is ..... & ..... to fix the plant in the mud.
- 3 Water lily flower petals are large in the shape of .....



#### Subjects integration:

- **English:** Ask and answer questions to demonstrate understanding of a text.
- **Science:** Analyze the interaction between members of a species and the surrounding environment to identify adaptations, focusing on external traits and their functions.

- **Life Skills:** Verbal communication - Observation - Understanding relationships.





## Analyzing Historical Information

### Activity 2

Read and learn the historical information about "Water lilies":

#### Text books "By Historians"

Looking at many hieroglyphics, it is easy to see that the water lily (lotus) flower is common in ancient Egyptian works. The meaning of the lotus flower is associated with rebirth. Ancient Egyptians associated the lotus flower with the sun, because it



closes up at night, and then reopens in the Sun the next day. Therefore, the lotus came to symbolize the sun and the creation.

#### Analyzing Historical

#### Photographs "By photographers"



**Search excerpts and photographs to know more about water lilies.**

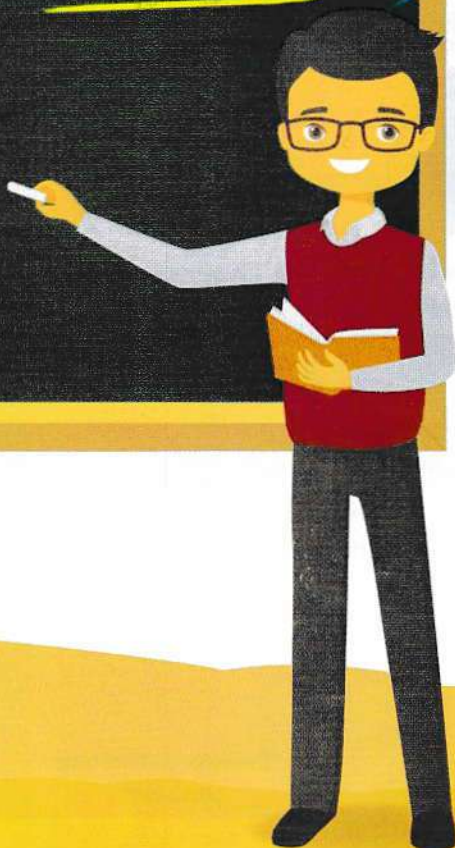
- Parents' Tips: Activity (2): Assist your child to analyze the differences between historical information from different sources that help in identifying the historical background behind water lilies in ancient Egypt.
- Aim: Use historical information to trace adaptations in a water lily.





Water lilies (Lotus) are very important in Egypt since ancient times, and we explored its origin from Egyptian artwork, text books photographs and artifacts.

## Information



### Artwork "By ancient Egyptians"



### Artifact "By ancient Egyptians"



**Search to find what we can learn more about water lilies from artworks and artifacts.**

#### ○ Subjects integration:

- English: Ask and answer questions to demonstrate understanding of a text.
- Social Studies: Identify different types of sources for historical information such as (textbooks, eyewitness accounts, stories from elders, news articles and songs).

#### ○ Life Skills: Verbal communication.

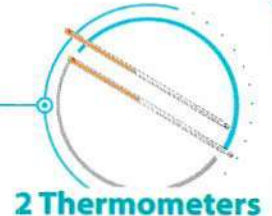


**Adaptation of traits in animals & plants is a slow steady process that may take hundreds, thousands, or even hundreds of thousands of years.**

## Experiment Time

Let us do an experiment to investigate how blubber is an adaptation that can help polar bear survive:

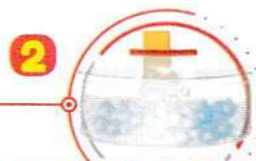
### Tools



### Steps



Place your hand in an empty plastic bag.



Put your hand with the empty plastic bag into the ice water for few seconds.



Fill the large plastic bag with vegetable fat.



Put your hand in the small plastic bag then place it in the larger one with fat.

"Double-walled bag with fat"

- **Parents' Tips:** Assist your child to follow the following steps to investigate how blubber is an adaptation that can help polar bears to survive in polar environment.
- **Aim:** Participate in a hands-on activity to better understand the importance of fats in maintaining the temperature.



**Steps****5**

Put your hand with the doubled-walled bag with fat inside the iced water for few seconds.

**6**

Replace your hands with thermometers for few minutes to record the temperature of each.

**Observation**

Record the temperatures, then tick (✓) your observations:

Cases	Temperature (°C)
Empty plastic bag	.....
Plastic bag with fat	.....

- Your hands felt the ..... inside each bag.  
☐ same ☐ different
- Your hands felt cooler in step number .....  
☐ 2 ☐ 5
- Did the temperature measuring data support your observation?  
☐ Yes ☐ No

**Conclusion**

Blubber (layers of fat) helps polar bears adapt to keep their bodies temperature constant (warm) to survive in their extremely cold environment.

○ **Subjects integration:**

- **English:** Ask and answer questions to demonstrate understanding of a text.
- **Science:** Analyze the interaction between members of a species and the surrounding environment to identify adaptations, focusing on external traits and their functions.

- **Life Skills:** Verbal communication - Observation.



# All about Blubber

## Activity

Read and learn, then answer:

Today, we did a marvelous experiment to investigate how "blubber" is an **adaptation** that can **help** "Polar bears" to **survive** in **polar regions**.

Our teacher explained that the blubber is a **thick fatty layer** with many **blood vessels** which acts as an **insulating material** that **prevents** the **loss of heat** from their bodies to the surrounding environment and **keeps** their **bodies temperature constant** (the same).

And we also learned that "Polar bears" have thick **white fur** to **keep them warm** in their cold Arctic homes & also **helps** them to **blend with the snow** as they sneak-up on their preys.

Learning about "Polar bears" was really interesting!!



**Search to know more about polar bears and how blubber helps them survive. Also, remember that their white fur is the trait that helps them find their preys.**

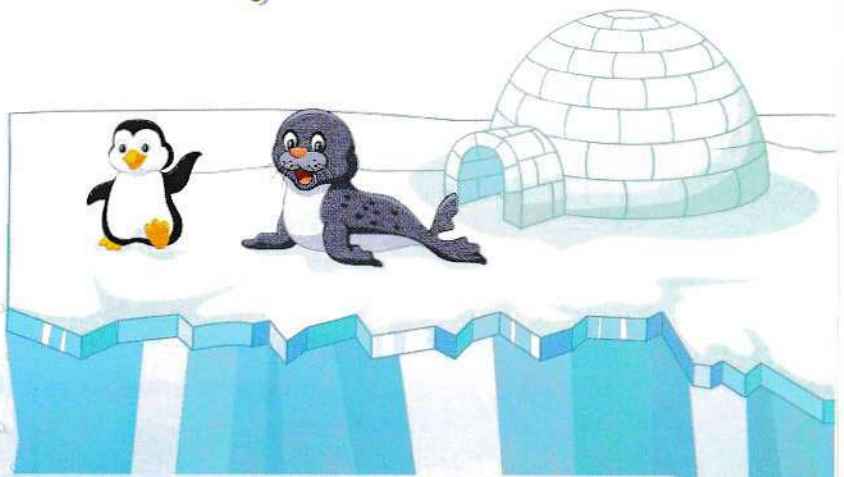
- **Parents' Tips:** Let your child read the conversation between Ramy and Sally about how blubber acts to help polar bears survive in polar environment. Assist him/her use the internet to search about how polar bears' skin helps them survive and find their preys, then let him/her answer the questions.
- **Aim:** Explain how animals adapt to an environment.



**Note:**

- Cold climate animals might have other adaptations:

- a) Some can shiver to keep their muscles warm.
- b) Some fluff their feathers to trap warm air near their bodies.

**Complete using the given words:**

**blubber - higher - shiver - white fur - slow steady - thick fat layer with blood vessels - fluff**

- 1 Adaptation traits in animals & plants is a ..... process.
- 2 Solid vegetable shortening represents .....
- 3 The temperature measurement inside the double-walled shortening bag was ..... than inside the empty plastic bag.
- 4 The ..... helps polar bears blend in ice.
- 5 Blubber is a .....
- 6 Other cold climate animals ..... to keep their muscles warm or ..... their feathers to trap warm air.



**Search about the traits that help the camel survive in hot weather with very little food and water.**



○ **Subjects integration:**

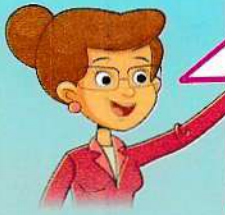
- **English:** Ask and answer questions to demonstrate understanding of a text.
- **Science:** Analyze the interaction between members of a species and the surrounding environment to identify adaptations, focusing on external traits and their functions.

- **Life Skills:** Verbal communication - Understanding relationships.



# Lesson 7

## Can you See me?



We learned that adaptations occur when living things are born with traits that help them to survive & reproduce. Let us learn how organisms act to stay safe from predators. They adapt to the environment by "**Camouflaging**" which is a phenomenon of blending into the environment through the use of colors & patterns.

### Activity 1 Read & notice the changes developed over time, then answer:

In 1880, peppered moths existed in both light and dark colors, but most of them were light colored. The dark colored peppered moths were easily attacked by predators more than the light colored peppered moths. This is because dark colored peppered moths were easily seen on the light colored bark of trees.



After the environmental changes that happened due to human activities, e.g. burning coal, causing dark deposits to stick to the bark of the trees, the light peppered moths started to be seen & easily preyed on.

#### Tick (✓):

\* In your opinion, which color trait allowed more successful survival & became more common?

☐ Light colored peppered moth.

☐ Dark colored peppered moth.



- **Parents' Tips: Activity (1):** Assist your child to read and understand how organisms adapt to the blend into the environment through the use of colors and patterns, then answer the given question.
- **Aim:** Explain the purpose of camouflage.
- **Subjects integration:**
  - **English:** Ask and answer questions to demonstrate understanding of a text.
  - **Science:** Analyze the interactions between living organisms and nonliving things in a habitat.
- **Life Skills:** Critical thinking - Verbal communication - Asking questions.



**Activity 2**

Tick (✓) the camouflaged animal, then write below each picture how camouflage aids in its survival to hide "from enemies":

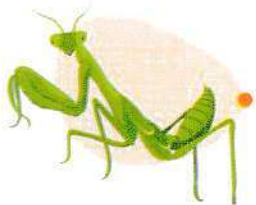
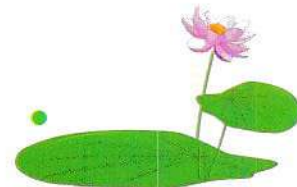


- **Parents' Tips: Activity (2):** Assist your child to look at the given pictures to answer the given question and discuss with him/her how he/she can identify that the camouflage feature in animals helps them to hide from enemies to survive.
- **Aim:** Explain the purpose of camouflage.
- **Subjects integration:**
  - **English:** Ask and answer questions to demonstrate understanding of a text.
  - **Science:** Analyze the interactions between living organisms and nonliving things in a habitat.
- **Life Skills:** Critical thinking - Communication.




**Activity 3**

Match the animals to their suitable environment to help them hide from their enemies:

**Animals**

**Environment**


○ **Parents' Tips: Activity (3):** Let your child look at the given pictures and identify which environment will help each animal hide from enemies to survive, and let him/her answer the given question.

○ **Aim:** Explain the purpose of camouflage.

○ **Subjects integration:**

- **English:** Ask and answer questions to demonstrate understanding of a text.

- **Science:** Analyze the interactions between living organisms and nonliving things in a habitat.

○ **Life Skills:** Critical thinking - Communication.





## Camouflage me

### Activity

4

Using your crayons, help the butterflies to camouflage to hide from their enemies:



- **Parents' Tips:** Activity (4): Help your child use his/her crayons to help the given butterflies to camouflage from their enemies.
- **Aim:** Explain the purpose of camouflage.
- **Subjects integration:**
  - **English:** Ask and answer questions to demonstrate understanding of a text.
  - **Science:** Analyze the interactions between living organisms and nonliving things in a habitat.
- **Life Skills:** Critical thinking – Communication.



## Lesson 8

## Beaks

**Different birds have many different types of beaks.**

### Activity

Look at the pictures and learn about the types of beaks:



#### Spoon beak

They look like spoons.



#### Scissors beak

They look like scissors.



**Search to know more about the types of food that "spoon beak" and "scissors beak" birds eat.**

- **Parents' Tips:** Help your child identify the different types of beaks, then assist him/her to use the internet to search about the suitable type of food for each beak.
- **Aim:** Simulate various bird beaks competing for different foods.





### **Tweezers beak**

**They look like tweezers.**



### **Clothespin beak**

**They look like clothespin.**



**Search to know more about the types of food that "Tweezers beak" & "Clothespin beak" birds eat.**

#### **Subjects integration:**

- English: Ask and answer questions to demonstrate understanding of a text.
- Science: Analyze the interactions between living organisms and nonliving things in a habitat.

○ Life Skills: Critical thinking – Communication.





Try it  
yourself

## Beak Investigation

Experiment Time

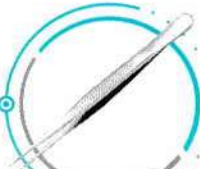


Let us perform this experiment to explore different types of beaks & see what kinds of food they can collect:

### Tools



Plastic spoon



Tweezers



Clothespin



Scissors



Paper cup  
(Bird's stomach)



Tray with different materials  
(paper clips/ rubber bands/ toothpicks/  
small pasta/ seeds/ dry beans/ rice)

### Hypothesis:

★ Which beak type/s do you expect to collect the most food?

☐ Plastic spoon

☐ Tweezers

☐ Clothespin

☐ Scissors

○ **Parents' Tips:** Help your child follow this experiment steps to explore how different types of beaks can collect different types of foods.

○ **Aim:** Analyze simulation data to make conclusions.



**Steps**

Hold the plastic spoon & start picking items (food) from the tray & deposit the collected items in the cup (bird's stomach)



Repeat the previous steps using the tweezers, then the clothespin & the scissors. (each for 20 seconds)

**Observation**

Count the contents of the cup (by type) after testing each beak & record the results in the table:

Beak type	Paper clips	Rubber bands	Toothpicks	Small pasta	Seeds	Dry beans	Rice
Spoon							
Tweezers							
Clothespin							
Scissors							

**Conclusion**

\* ..... beak type is the best adapted to different food types.

☐ Spoon

☐ Tweezers

☐ Clothespin

☐ Scissors

\* ..... beak type is the least adapted to different food types.

☐ Spoon

☐ Tweezers

☐ Clothespin

☐ Scissors


○ **Subjects integration:**

- **English:** Ask and answer questions to demonstrate understanding of a text.
- **Science:** Analyze the interactions between living organisms and nonliving things in a habitat.

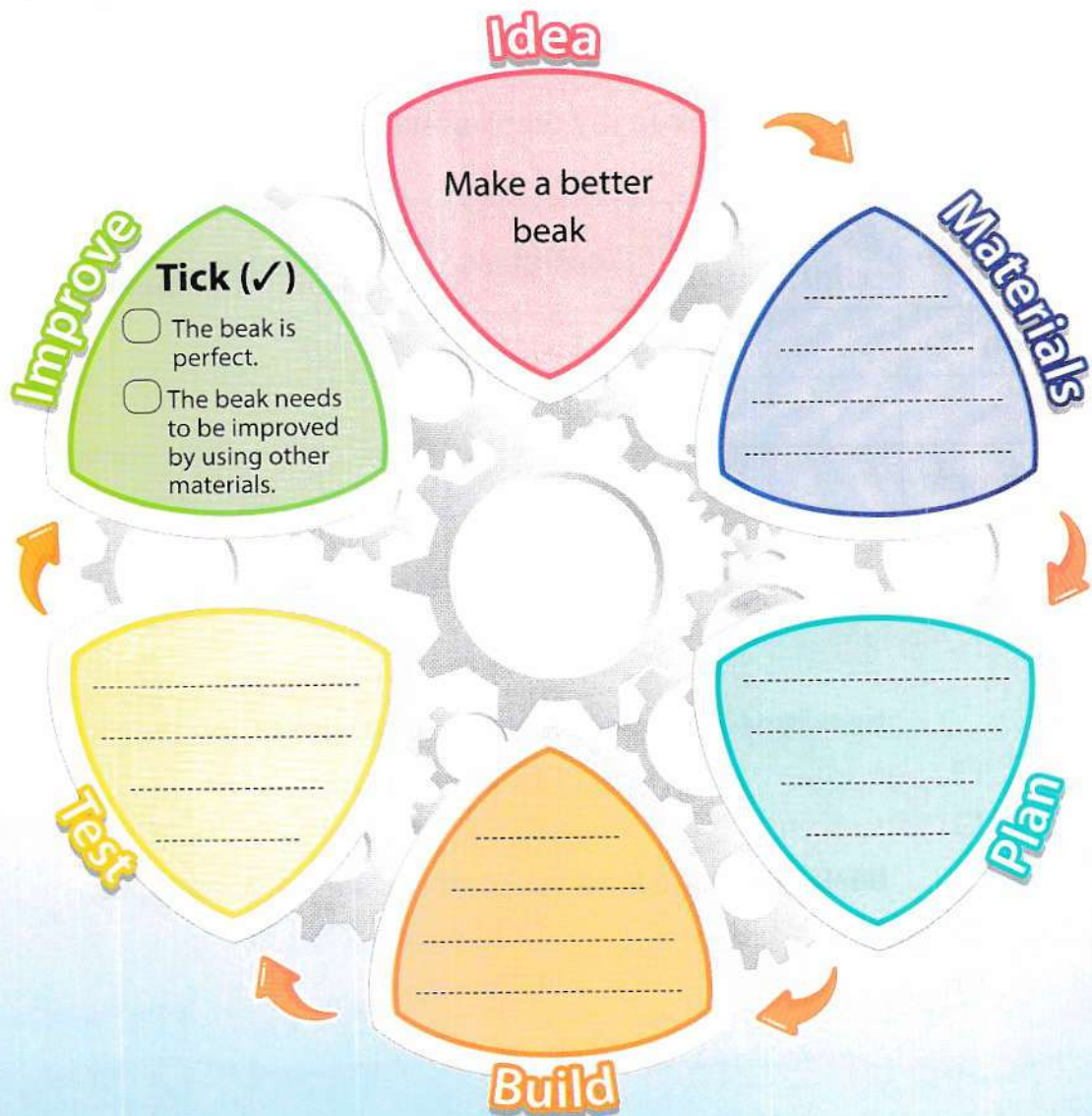
○ **Life Skills:** Critical thinking – Communication.



# Project

Building a better beak

Using "Engineering design process" design better beak for a specific food source.





## Diagram of a beak:



**Tick (✓) the learning outcomes you have learned through the chapter:**

- ☐ Define origin.
- ☐ Predict future changes "next year, five years, and 10 years".
- ☐ Describe inherited traits.
- ☐ Explain how the inherited traits affect an animal's survival.
- ☐ Explain how plants and animals adapt to an environment.
- ☐ Explain the purpose of camouflage.
- ☐ Investigate the advantages and disadvantages of adaptations.
- ☐ Simulate various bird beaks competing for different food.



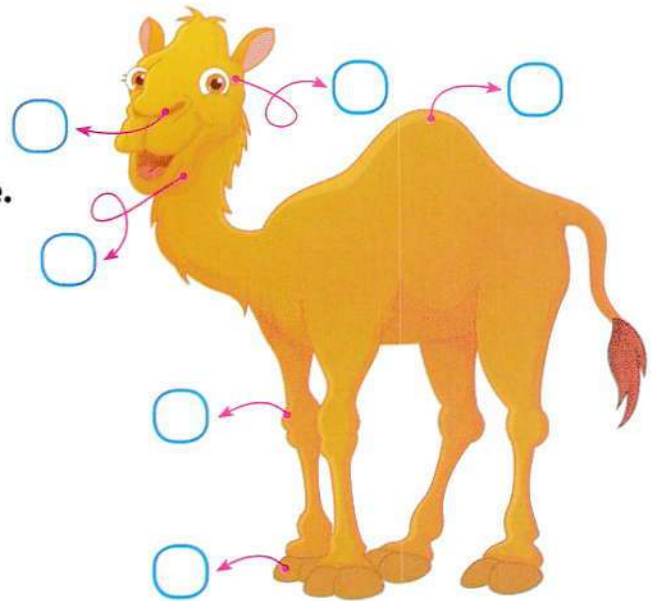


# Al-Adwaa oasis



Read and write the suitable number on each body part:

1. A **hump** on the camel's back.
2. Long, tick **eyelashes**.
3. **Nostrils** that can open and close.
4. A tough, leathery **mouth**.
5. Tough, leathery **knee pads**.
6. **Webbed** feet with two toes.



Now write the numbers to match with the adaptations:

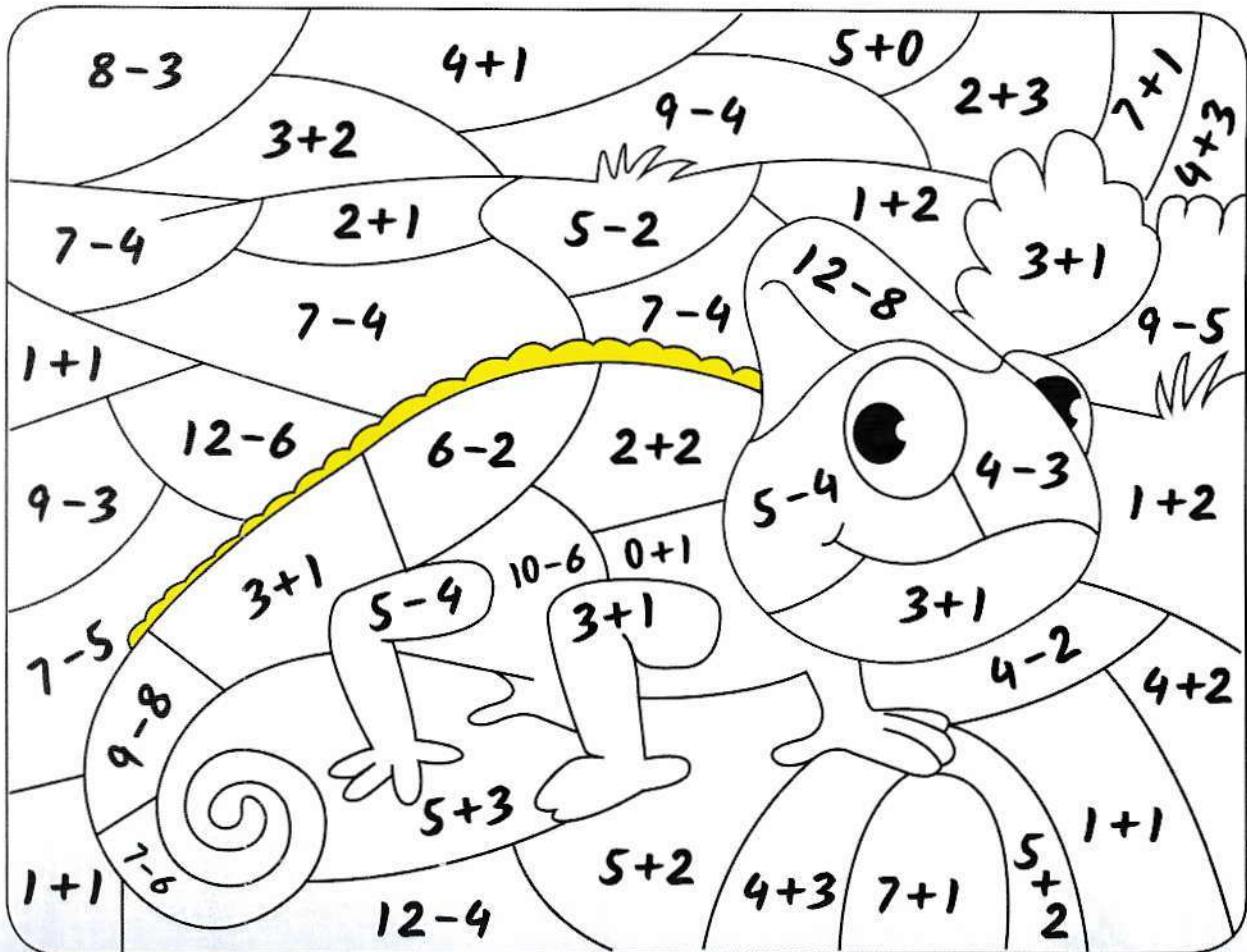
- ☐ These protect the camel eyes from the sand and the sun.
- ☐ This helps the camel to have nutrients for a long time.
- ☐ This helps the camel to chew tough, thorny plants.
- ☐ These help the camel to kneel on the hot sand.







Calculate, then use your crayons to color the picture according to the results matching to the given numbers.



Green

1,4



Gray

2,6



Yellow

3



Blue

5



Brown

8,7



Pink

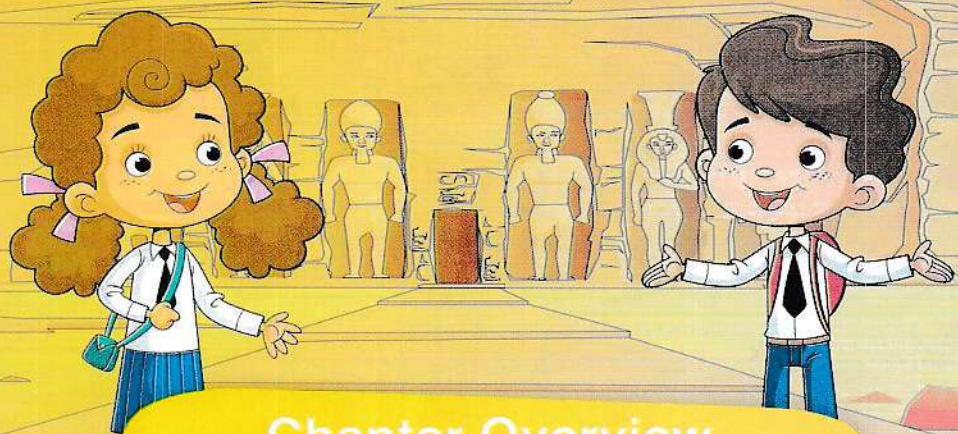
9



## CHAPTER

## 2

# "A New Look to Ancient Art"



## Chapter Overview



### Discover:

- Students discover examples of art around them nowadays and in Ancient Egypt.
- Students describe how color is used and developed in artwork.
- Students explore the use of geometric shapes in art.



### Learn:

- Students learn how art can be seen in clothing and how block printing can be used in the creation of geometric patterns.
- Students explain how technology has impacted the creation of art over time.
- Students research past and present artists and musicians.
- Students learn techniques for creating sculptures in both ancient and modern-day examples.



### Share:

- Students collaborate to interpret a painting from Ancient Egypt as a play.
- Students write dialogue and create props and scenery applying artistic strategies.



# Pacing Guide

Lesson

Instructional Focus

Key vocabulary

Discover

1

## Students will:

- Compare character actions and feelings in a story.
- Identify examples of art in the contemporary world.

- Origin.

2

- Observe examples of art in Ancient Egypt.
- Sequence artwork in order from the oldest to the most recent.
- Apply multiplication and fractions to analyze parts of a painting.

- Area.

3

- Explore gradients of color (such as from dark to light).
- Explain the role of white and black in creating gradients of color.
- Use geometric shapes in original artwork.

- Gradient.  
- Quadrilateral.

Learn

4

## Students will:

- Identify various natural, raw materials used in making clothing.
- Compare clothing worn in different regions and climates of the world.
- Explore fingerprinting and block printing.
- Describe how technology has impacted art.

- Raw materials.

5

- Research and present biographical information of Egyptian musicians and artists.
- Compose own lyrics to a modern Egyptian musician song to summarize new learning.

- Musical instruments

6

- Compare and contrast sculptures from Ancient Egypt and modern day.
- Develop a plan to create an original sculpture.

- Abstract.  
- Sculpture.

7

- Create an original sculpture.
- Give compliments to peers' artwork.

- Adhesive.

Share

8

## Students will:

- Analyze ancient paintings to interpret subjects and events.
- Create dialogue to reveal the plot of the story depicted in art.

- Dialogue.

9

- Collaborate to create appropriate scenery and props for the play.
- Collaborate to determine how to use body language to help tell the story.

- Props.  
- Scenery.

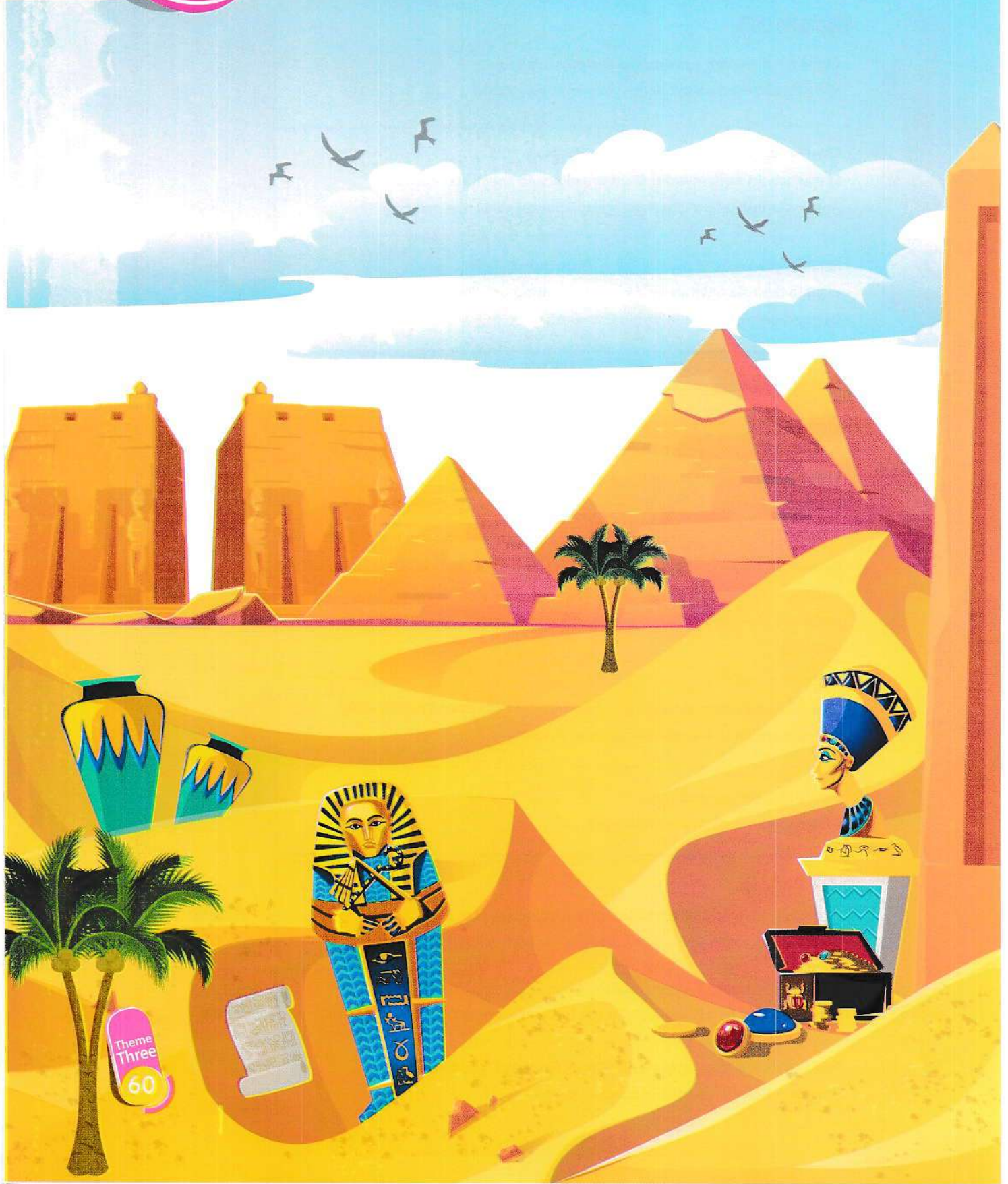
10

- Perform a play using appropriate body language and creativity.
- Provide feedback on others' performances.



Lesson  
**1**

**Ancient Arts**



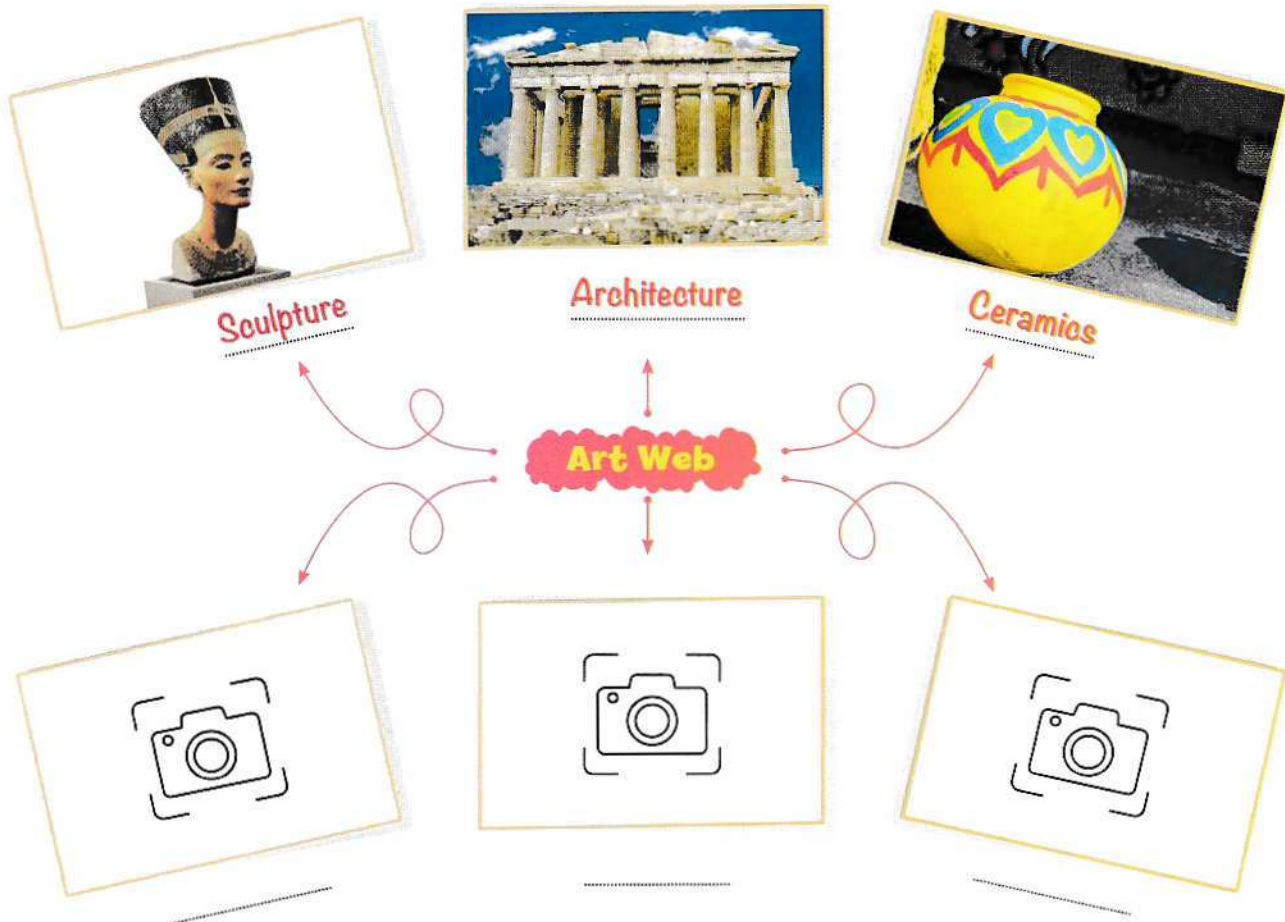




Art is all around us in our daily life in many different forms (types) from sculptures to jewelry, music and drama. Some of these arts were created from clay, metals, paintings, etc.

### Activity 1

Search to explore other forms of art, stick their pictures to complete your art web and write the name of each:



- **Parents' Tips: Activity (1):** Help your child use the internet to search about different forms of art to fill in the art web.
- **Aim:** Explore different forms of art.
- **Subjects integration:**
  - **Social studies:** Explain the benefit of using multiple sources to study history.
  - **Science:** Communicate information with others using pictures.
  - **English:** Research a specific topic or question using a variety of resources.
- **Life Skills:** Respect for diversity - Critical thinking.



## Alexandria National Museum

### Activity 2

Read and underline the different forms of art Sally & Ramy observed in their trip, and notice how art evoked their feelings, then answer:

1  
Hello, dears!  
How was your trip to  
Alexandria museum?  
How did you feel?

2  
mmm....  
I wasn't excited & I  
didn't enjoy the visit  
that much.. It was  
exhausting as well!

3  
To me it  
was very  
interesting!!  
I enjoyed and  
learnt a lot ...

4  
I was so impressed by  
the large sculptures  
of the past Egyptian  
rulers and the tools  
used during this time.  
The portraits were also  
amazing.

5  
To me.. it wasn't that much  
interesting!! I can know  
all about them from the  
books with more details.

6  
The canopic jars  
were amazing too!  
I found that they  
are made up  
from clay.

7  
That was too  
scary!! They are  
parts from the  
tombs. Didn't  
you get scared?

- Parents' Tips: Activity (2): Assist your child to read the story and underline how different forms of arts evoked (showed) different feelings of the characters.
- Aim: Compare character actions and feelings in a story.





8

Not at all! I like all ancient Egyptian art. I even loved the ancient Egyptian jewels with all the beautiful details they were made with, even after thousand years!



9

I agree! Also what caught my eye were the colors and the details **Mohamed Ali's royal family** jewels were made with.



### Tick (✓):

1 There was only one type of art in the museum.

☐ Yes

☐ No

2 Alexandria National Museum has great Egyptian artifacts.

☐ Yes

☐ No

3 The artifacts affected Ramy & Sally's feelings differently.

☐ Yes

☐ No



#### Subjects integration:

- English: • Read and comprehend an informational text.  
• Ask and answer questions about key details in the story.

- Life Skills: Respect for diversity - Empathy - Verbal communication.






## Understanding the Characters

**Art evokes different feelings that affect our actions.**

**Activity 3** From the previous activity, complete the following charts:

**(A) Art form**



**Ramy feels**

.....

**Sally feels**

.....

**Action**

.....


.....

**Action**

.....

.....

**(B) Art form**



**Ramy feels**

.....

**Sally feels**

.....

**Action**

.....

.....

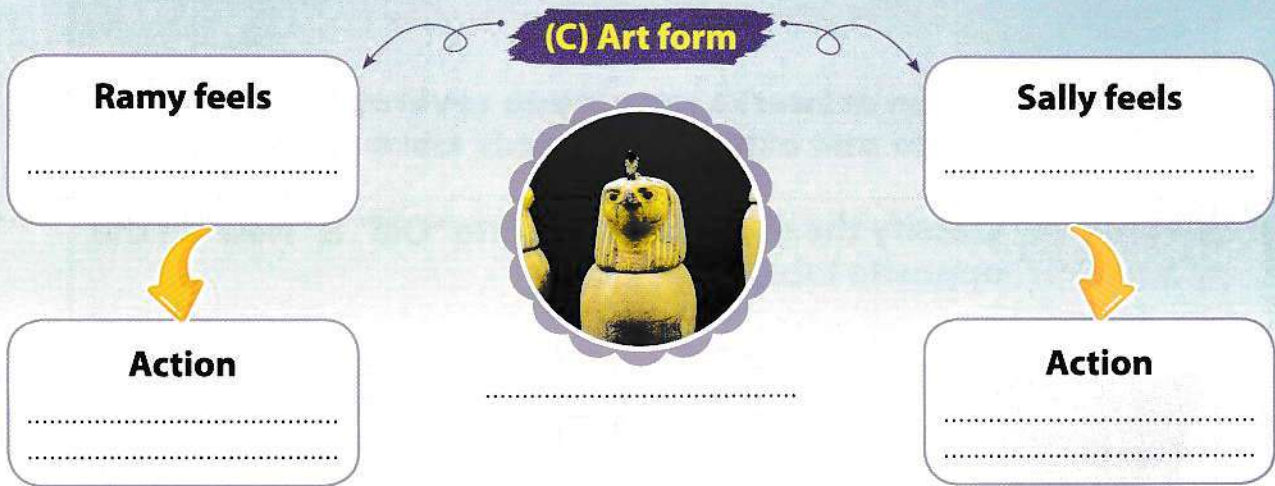
**Action**

.....

.....

- **Parents' Tips: Activity (3):** Assist your child to identify the actions and feelings for Ramy & Sally towards the different artworks from the context in the previous activity.
- **Aim:** Compare character actions and feelings in a story.





**Search for other examples of art in your contemporary worlds, and record your reactions toward each artwork.**



○ **Subjects integration:**

- English: • Use graphic organizers to plan writing.  
• Research a specific topic or question using a variety of resources.

○ **Life Skills:** Respect for diversity.



## Lesson 2

# When was it Made?

**Some Egyptian artworks were made several thousands of years ago and others were made more recently.**

### Activity 1

**Classify the given artworks into "Old" & "New" in the opposite table:**



**Geometric bowl**

- Around the second century.
- Faded Colors.



**King Tut's Tomb**

- Since 1323 BCE.



**Great Sphinx**

- Around 2525 BCE.
- Made of limestone.



**Broad Collar**

- Around 1800 BCE.



**Colorful Pottery**

- Recent/ Few years ago.
- Bright Colors.



**Glass beads necklace**

- Around the fourth century.



**Lion Sculpture**

- Since 1933.
- Made of copper.



**Computerized papyrus painting**

- Recent/ Few years ago.
- Bright colors.

- **Parents' Tips: Activity (1):** Help your child observe the images and understand the given information below each, then let him/her draw a timeline and arrange the artworks using the clues from the oldest to the newest one.
- **Aim:** Sequence artworks in order from the oldest to the most recent.



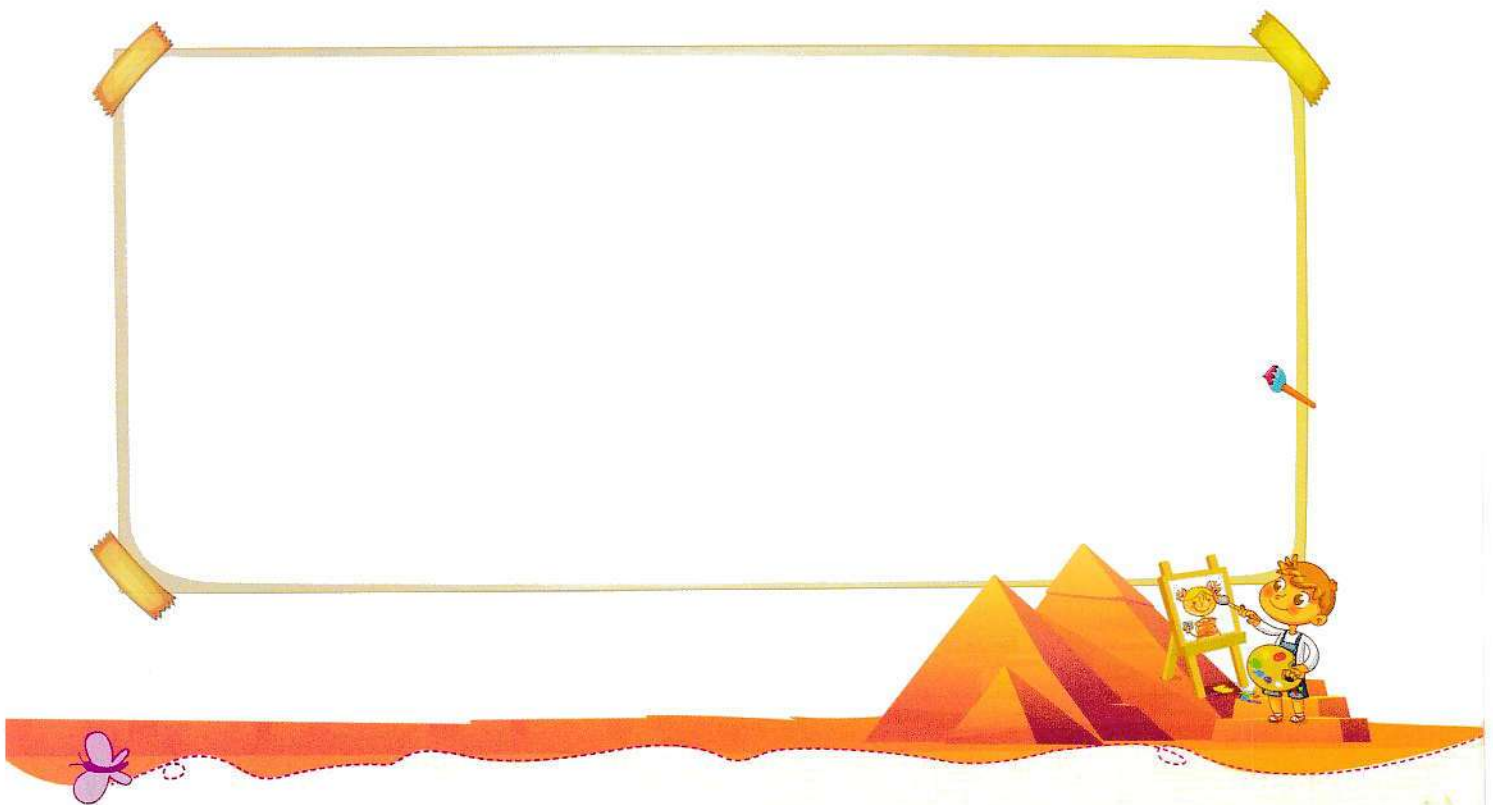


**Note:**

**BCE** means before common era.

Old	New

**Draw a timeline and arrange the artworks from the oldest to the newest (recent):**



- **Subjects integration:**
  - **Social studies:** Trace the sequence of a historical event using a timeline.
- **Life Skills:** Collaboration - Decision-making - Reading.





# Tutankhamun

## Activity 2 Read & understand, then answer:



- Tutankhamun was a king over 3000 years ago.
- When he died, he was put in a **tomb**.
- His **burial chamber**, the room where the coffin was laid, was covered in paintings.



### "King Tut's burial chamber"



- The rectangular dimensions are 6 meters in length and 4 meters in height.
- Its area = Length  $\times$  Height  
= 6 meters  $\times$  4 meters = 24 m<sup>2</sup> "Multiplication strategy"

### Calculate:

- A squared wall, about 4 meters in length and 4 meters in height.
- Calculate its area using the "Repeated addition or multiplication strategy".
- Area = ..... + ..... + ..... + .....  
= ..... m<sup>2</sup>
- Area = .....  $\times$  ..... = ..... m<sup>2</sup>

- **Parents' Tips: Activity (2):** Discuss with your child about King Tutankhamun and how ancient Egyptians applied mathematics in their artwork, then help your child use different mathematical strategies to find the area of squared or rectangular shapes.
- **Aim:** Apply multiplication and fractions to analyze parts of a painting.





Tick (✓):



- This wall is divided into 12 small equal parts and 2 larger parts (double).

So, the total number of small sections = ..... sections

☐ 12

☐ 16

☐ 14

- Each small section represents ..... of the entire wall.

☐  $\frac{1}{12}$

☐  $\frac{1}{16}$

☐  $\frac{1}{14}$

- The larger rectangle is ..... of the area of the entire wall.

☐  $\frac{1}{12}$

☐  $\frac{2}{16}$

☐  $\frac{2}{14}$



○ **Subjects integration:**

- **Math:**
  - Relate area to the operations of multiplication and repeated addition.
  - Use strategies to solve multiplication and division problems such as drawings.
  - Read and write proper fractions.

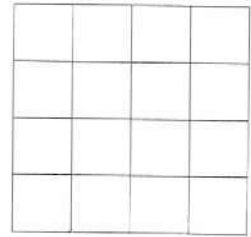
- **Life Skills:** Critical thinking - Decision-making.



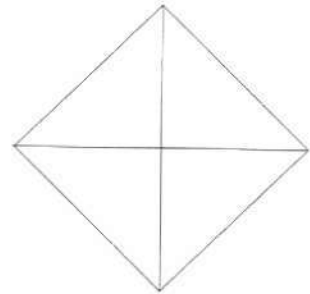

**Activity 3**

Look at the following geometric shapes (equally divided), and use your coloring crayons to represent the following fractions:

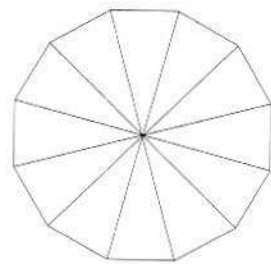
1. Color to represent  $\frac{6}{16}$  from the whole area.



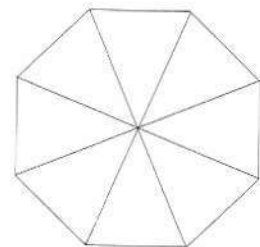
2. Color to represent  $\frac{3}{4}$  from the whole area.



3. Color to represent  $\frac{7}{12}$  from the whole area.



4. Color to represent  $\frac{5}{8}$  from the whole area.



- **Parents' Tips: Activity (3):** Help your child understand how to use fractions to represent a part of the area, then let him/her represent the fractions on the given shapes by coloring.
- **Aim:** Represent part of area using fractions.
- **Subjects integration:**
  - **Math:** Describe a proper fraction ( $\frac{1}{b}$ ) as the quantity formed by 1 part when a whole is partitioned into (b) equal parts.
- **Life Skills:** Critical thinking - Decision-making.

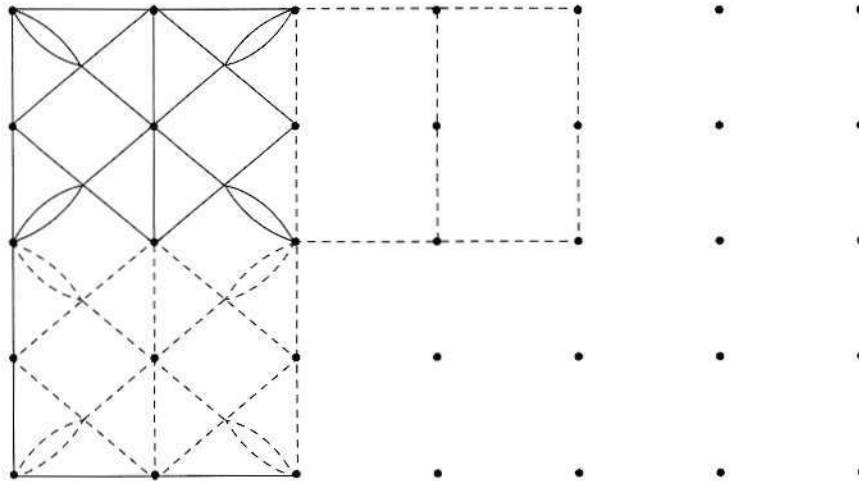




## Design a Pattern

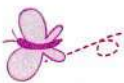
**Activity 4** Apply math to break down the painting into parts, then repeat the pattern and color it:

(A)



(B)

Now, create your own pattern, then color it:



- **Parents' Tips:** Activity (4): Help your child use fractions (division) & multiplication to create repeated patterns.
- **Aim:** Apply math in art by using division and multiplication to create repeated patterns.
- **Subjects integration:**
  - **Math:** Use strategies to solve multiplication and division problems such as drawings and relationships between multiplication and division.
- **Life Skills:** Critical thinking - Decision-making.



# Lesson 3

## Ancient Egyptian Jewelry

**Ancient Egyptians used six main colors in their artworks. These colors occur naturally in Earth minerals.**

**Activity 1** Read & learn, then answer:



### Main Colors:

Red  
"Deshet"

Green  
"Wadj"

Blue  
"Khesbedj & irtiu"

Yellow  
"Kenit & khenet"

White  
"Shesep & Hedj"

Black  
"khem"

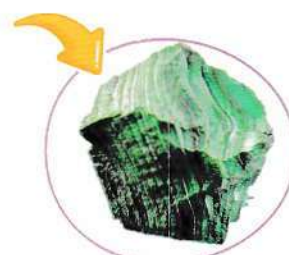
### Earth minerals (Naturally occurring)



Orpiment



Red ochre



Malachite

- **Parents' Tips: Activity (1):** Assist your child to notice the six main colors shown in the given pictures of ancient Egyptian artworks, and discuss with him/her that these colors occur naturally in Earth minerals, then let him/her answer the questions.
- **Aim:** Explore the six main colors used in ancient Egyptian artworks.





**Complete using the given words:**

**green - desher - six - mineral rocks - khem - malachite -  
red ochre - orpiment**

- 1** There are ..... main colors in Ancient Egypt.
- 2** Ancient colors came from .....
- 3** ....., ..... and ..... are from ancient main colors.
- 4** ..... is a green earth rock.
- 5** ..... is a yellow earth mineral stone.

**Tick (✓):**

**True**

**False**

- 1** Art doesn't change over time.
- 2** Ancient Egyptians used paint tubes for colors.
- 3** White color is called khem.
- 4** Red ochre is a green mineral stone.

☐☐☐☐☐☐☐☐

**Subjects integration:**

- **Visual art:** Identify the main colors used in ancient artwork.
- **Life Skills:** Accountability - Observation.





## It is Black and White

**Activity 2** Look at the picture & read, then tick (✓):



**Coloring** is a way that describes objects and how they reflect or give off light.



**1** Do the front and the back of the dresses have the same color?

☐ Yes

☐ No

**2** Are the colors graduated from darker to lighter?

☐ Yes

☐ No

**3** Do the colors graduation make the clothes appear red?

☐ Yes

☐ No

### Gradient:

It is the gradual blending from one color to another or from dark to light of the same color.

**Ex**

Black —————> Gray —————> White

Red —————> Orange —————> Yellow

○ **Parents' Tips: Activity (2):** Discuss with your child the meaning of the word "Gradient" and let him/her know that ancient Egyptians used gradient colorings in their artworks to appear more realistic.

○ **Aim:** • Explore gradients of color (ex: from dark to light).  
• Explain the role of white and black in creating gradient colorings.

Theme  
Three

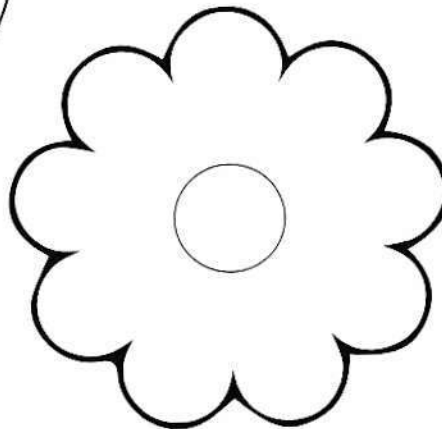
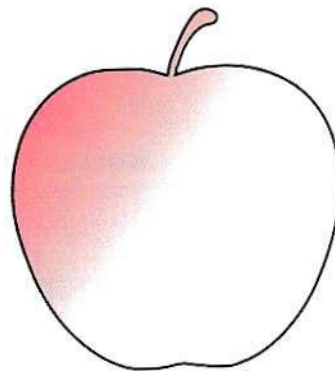
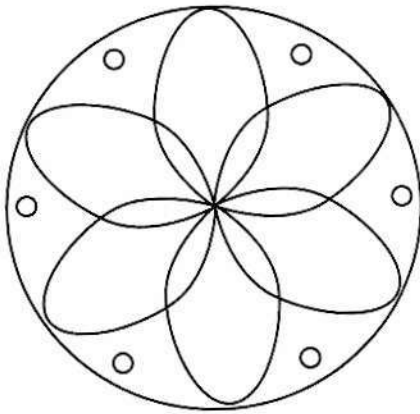
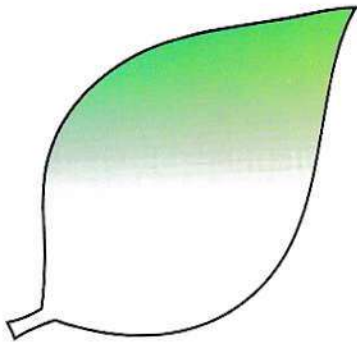
74



## Create gradient coloring using the same or different colors:

### Note:

- If you press hard on your coloring pencil, the color will look darker.
- If you press lightly on your coloring pencil, the color will look lighter.



### Subjects integration:

- Visual art: Explain the role of creating gradient coloring.
- Life Skills: Productivity - Accountability.





## Geometric Shapes

### Activity 3 Match each shape to its name:

#### Quadrilaterals:

are shapes that have 4 sides & 4 angles.



Square

Rectangle

Trapezium

Rhombus

### Identify the geometric shape in each artwork:



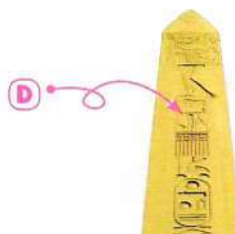
.....



.....



.....



.....

Ancient Egyptians used **geometric shapes** in jewelry, sculpture, pottery and architecture.

- **Parents' Tips: Activity (3):** Help your child understand the meaning of the quadrilateral shapes, then let him/her identify the geometric shapes used by ancient Egyptian artists to create their artworks.

- **Aim:** Use geometric shapes in original artwork.

- **Subjects integration:**

- **Visual art:** Identify geometric shapes in the classroom and other familiar locations.

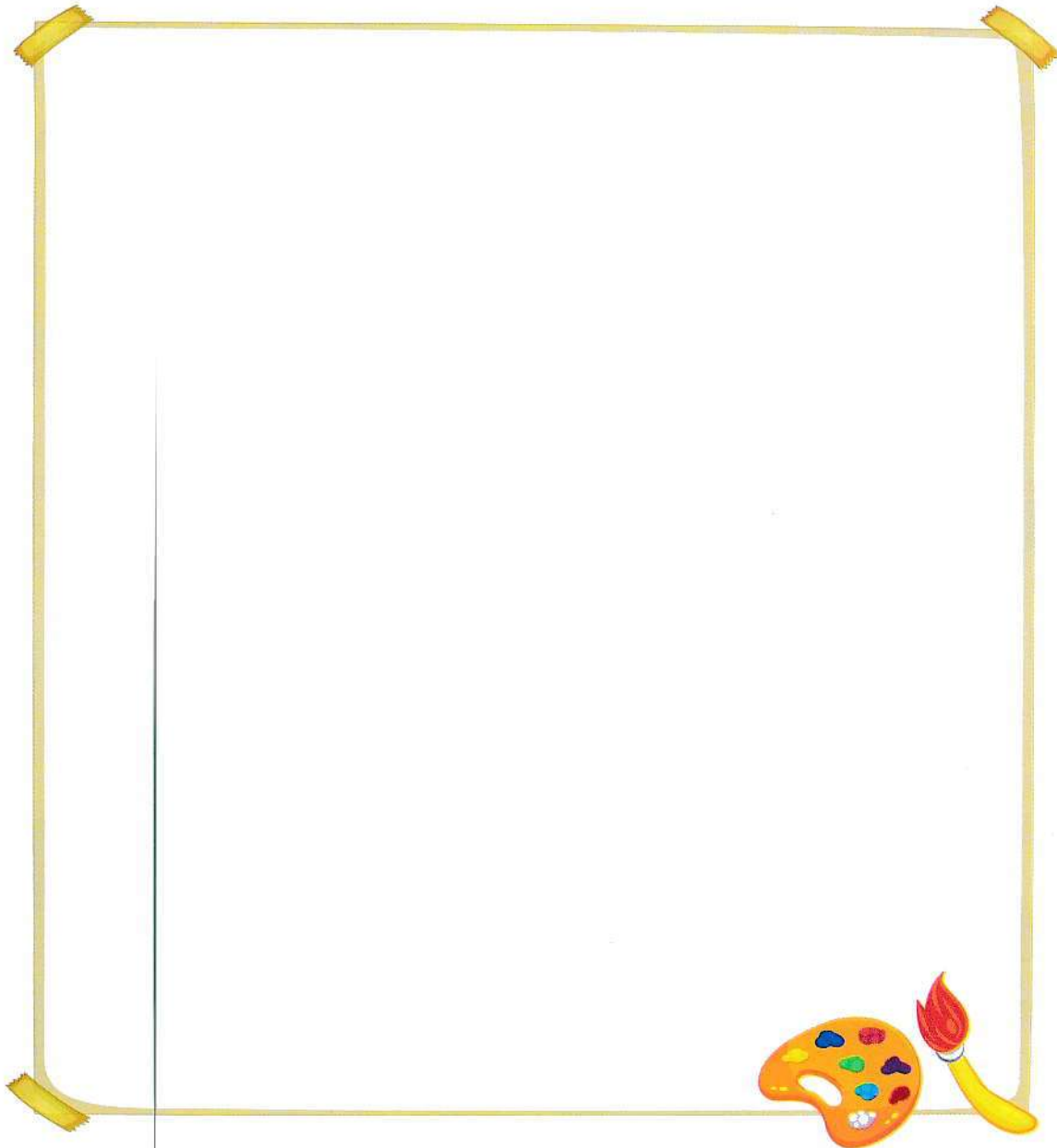
- **Life Skills:** Accountability - Critical thinking.





## Activity 4

Design a cuff or a bracelet using the Egyptian ancient arts, colors, color gradients, and shapes in multiple patterns:



- **Parents' Tips: Activity (4):** Assist your child to make a piece of artwork as "cuff or bracelet" using what he/she learned about colors, shapes, color gradients and patterns in ancient Egypt.
- **Aim:** Use geometric shapes in original artwork.
- **Subjects integration:**
  - **Visual art:** Create an original work of art that incorporates geometric shapes.
- **Life Skills:** Productivity - Critical thinking.



# Lesson 4

## Geo Clothes

### Patterns

are woven into cloth by using color strands, paints or dye.

**Activity 1** Write the name of each cloth pattern using the given words:

Floral - Stripes - Zigzag - Animal prints - Diamond



Use critical thinking

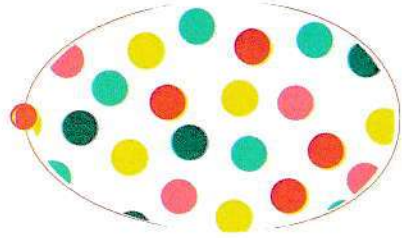


- **Parents' Tips: Activity (1):** Let your child look at the pattern pictures and identify the name of each one from the given words, then assist him/her to use the internet to search about the shape of the given cloth patterns and match each one with its name.
- **Aim:** Identify various patterns used in making clothing.



**Search the following geometric patterns to match them with their pictures:**

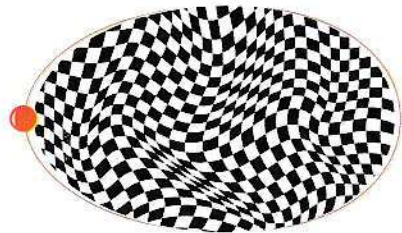
**Polka dots**



**Gingham**



**Checkered**



**Tartan Plaid**



○ **Subjects integration:**

- **Economics and applied sciences:** Compare and contrast patterns of clothing.
- **English:** Research a specific topic or question using a variety of resources.

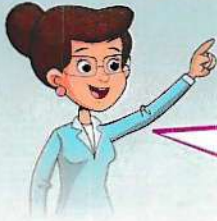
○ **Life Skills:** Critical thinking.





## Raw Materials

### Activity 2 Read and learn:



Clothes are made from natural raw materials such as cotton, silk, wool and linen, etc.



**Search about linen and wool fabric cycles.**

- **Parents' Tips:** Activity (2): Discuss with your child how the silk fabric production proceeds, then assist him/her use the internet to make search about the cycle of linen and wool fabric cycle.
- **Aim:** Identify various patterns used in making clothing.
- **Subjects integration:**
  - **Economics and applied sciences:** Distinguish between the origins and use of raw materials in the garment (clothes) industry.
  - **English:** Research a specific topic or question using a variety of resources.
- **Life Skills:** Critical thinking.

**Activity 3** Read, then answer:

make the production  
faster.

**Impact of  
technology**



are used to create  
patterns and designs.

**Production of fabrics**

not from natural  
materials.

**Complete using the given words:**

**cocoon - linen - Fine - computers - faster - mulberry leaves - strong**

- 1 Natural fabric raw materials are such as cotton and .....
- 2 Silkworm eats ..... native to China.
- 3 ..... and ..... fibers is the origin of commercial silk.
- 4 Silkworm spins ..... to make silk threads from it.
- 5 Today we create patterns art designs using .....
- 6 To make clothing today is ..... than centuries ago.

- **Parents' Tips:** Activity (3): Assist your child to know the main role of technology in making clothes nowadays.
- **Aim:** Describe how technology has impacted art.
- **Subjects integration:**
  - **Economics and applied sciences:** Distinguish between the origins and use of raw materials in the garment (clothes) industry.
- **Life Skills:** Critical thinking.



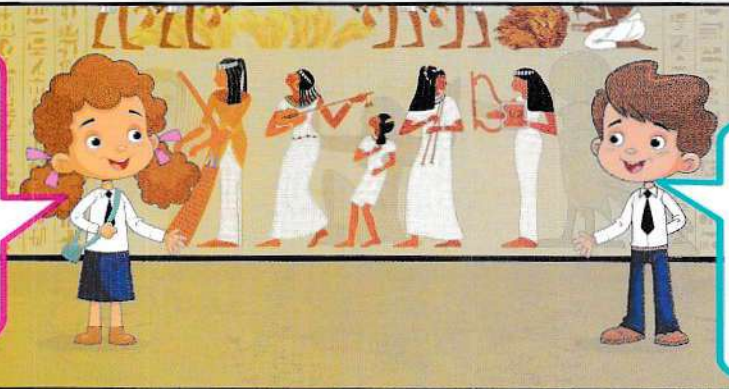


## Fashion Fun

### Activity 4 Read and learn, then answer:

1

How did the ancient Egyptians paint their walls to communicate their ideas, Ramy?



2

Fingers were the easiest way to apply paint, they also used block printing.

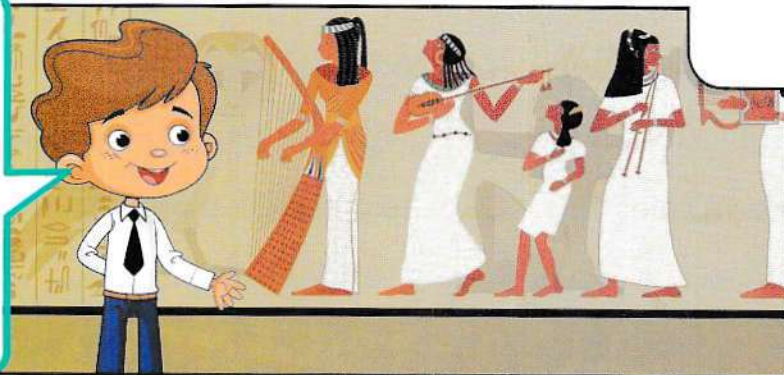


3

Block printing?!

4

Yes, block printing is done by carving a design in a hard substance like wood, then rubbing paint on it and pressing to another surface so it is easy to repeat a pattern using this method.

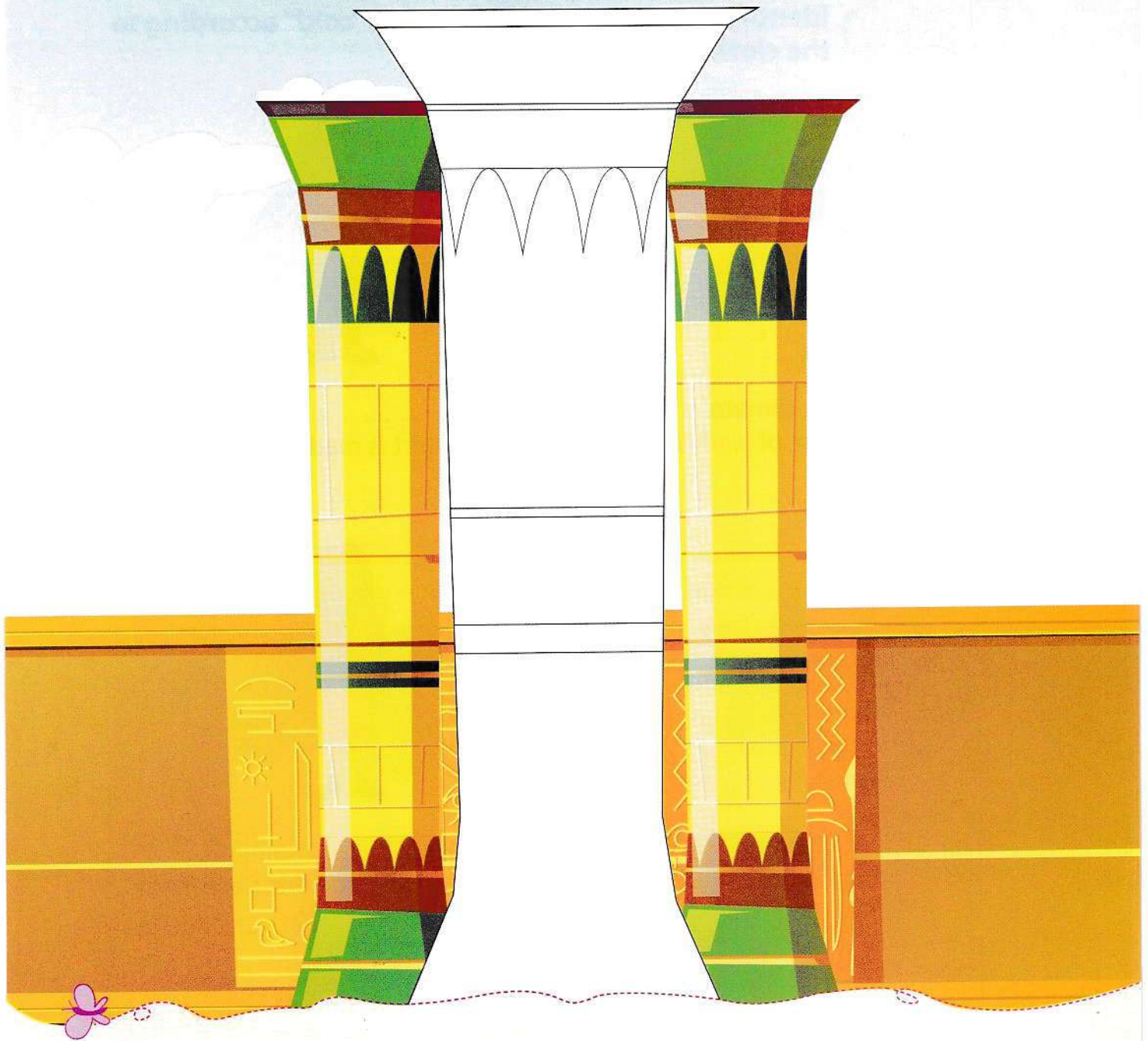


- Parents' Tips: Activity (4): Assist your child to read the conversation and understand the "Block printing" method and know how ancient Egyptians used this method to repeat patterns in their artworks, then help him/her to create his/her own block print and design the arch.
- Aim: Explore "Block printing" method.





From your reading, create your own design and paint the given arch using block printing method:



○ **Subjects integration:**

- English: • Read and comprehend an informational text.  
• Ask and answer questions about key details in the story.
- Virtual art: Create works of art using blockprinting.

○ **Life Skills:** Reading - Critical thinking.





## Climates Affect the Type of Clothing

**Activity 5** Identify the climate "hot/warm" or "cold" according to the cloth materials:



..... climate.  
- Clothes are made of **leather**.



..... climate.  
- T-shirt is made of **cotton**.



..... climate.  
- Clothes are made of **wool**.



..... climate.  
- The scarf and the dress are made of **silk**.

○ **Parents' Tips: Activity (5):** Discuss with your child how the climate affects the way we get dressed and the materials of the clothes we choose to wear, then let him/her answer the questions.

○ **Aim:** Compare clothes worn in different regions and climates of the world.

○ **Subjects integration:**

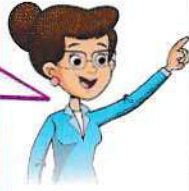
- **Economics and applied sciences:** Compare and contrast patterns of clothing in different regions and climates of the world.

○ **Life Skills:** Critical thinking.

# Lesson 5

## Origins of Egyptian Music

Ancient Egyptians' paintings and artworks involved music played at religious ceremonies, farms, and even battle fields, etc.



### Activity 1 Match the ancient instrument to its similar modern one:



### Complete:

★ Ancient Egyptians played music in different occasions such as ..... , ..... and .....

- **Parents' Tips: Activity (1):** Discuss with your child that Ancient Egyptians played music in different occasions, then let him/her look at the pictures and match each ancient instrument to its recent (modern) one.
- **Aim:** Identify the origin of Egyptian music.
- **Subjects integration:**
  - Music: Compare past and present musical instruments in the local community.
- **Life Skills:** Critical thinking - Observation.





## Musicians and Artists

**“Music and art are important in any society, they also reflect our feelings and what is happening in our life.”**



**Search about a musician such as “Sayed Darweesh” to complete his biography in the shown graphic organizer.**



**Name:** Sayed Darweesh

**Born:** .....

**Died:** .....

**From:** .....

**Type of music:**

.....

**Road to success:**

**- How did he become famous?** .....

How did his  
achievements  
affect my feelings?

**- What are his important achievements?** .....

.....

**Question I would like to ask him.**

.....

.....

**If I were  
a musician:**

.....

- **Parents' Tips:** Assist your child to do research about different musicians and artists such as “Sayed Darweesh” & “Alaa Awad”, then help him/her answer the questions to complete their biographies.
- **Aim:** Search and present biographical information about Egyptian musicians and artists.





**Search about an artist such as "Alaa Awad" to complete his biography in the graphic organizer:**



**Name:** Alaa Awad

**Born:** .....

**Died:** .....

**From:** .....

**Type of art:**

**Road to success:**

**- How did he become famous?** .....

**- What are his important achievements?** .....

How did his achievements affect my feelings?

**Question I would like to ask him.**

**If I were an artist:**



**Subjects integration:**

- **Music & Visual art:** Identify a local musician music and an artist artwork.
- **English:** Research a specific topic or question using a variety of resources.



- **Life Skills:** Critical thinking - Verbal communication - Observation.





## Activity 2

From your previous searches about “Sayed Darweesh” & “Alaa Awad”, notice the similarities & differences between them, then record your input in the table:

	Similarities	Differences
 <b>Sayed Darweesh</b> (musician)	<hr/> <hr/> <hr/>	<hr/> <hr/> <hr/>
 <b>Alaa Awad</b> (artist)	<hr/> <hr/> <hr/>	<hr/> <hr/> <hr/>



Search to find an audio recording of a “National Egyptian” song by Sayed Darweesh:

From your listening to the audio recording of the song you searched for, write the lyrics (words) of the song (you can write it in Arabic):



- **Parents' Tips:** Activity (2): Help your child find the similarities and differences between the musician and artist biographies and represent them in the given table, then assist him/her to search for a National Egyptian song for Sayed Darweesh and let him/her pay attention to the lyrics to be able to write them.
- **Aim:**
  - Give biographical representation of the similarities & differences between a musician & an artist.
  - Rewrite the lyrics of an Egyptian song.
- **Subjects integration:**
  - **Music & Visual art:** Identify a local musician & his/her music and an artist and his/her artwork.
  - **Music:** Write the lyrics of an Egyptian musician's song.
- **Life Skills:** Critical thinking - Verbal communication - Observation.

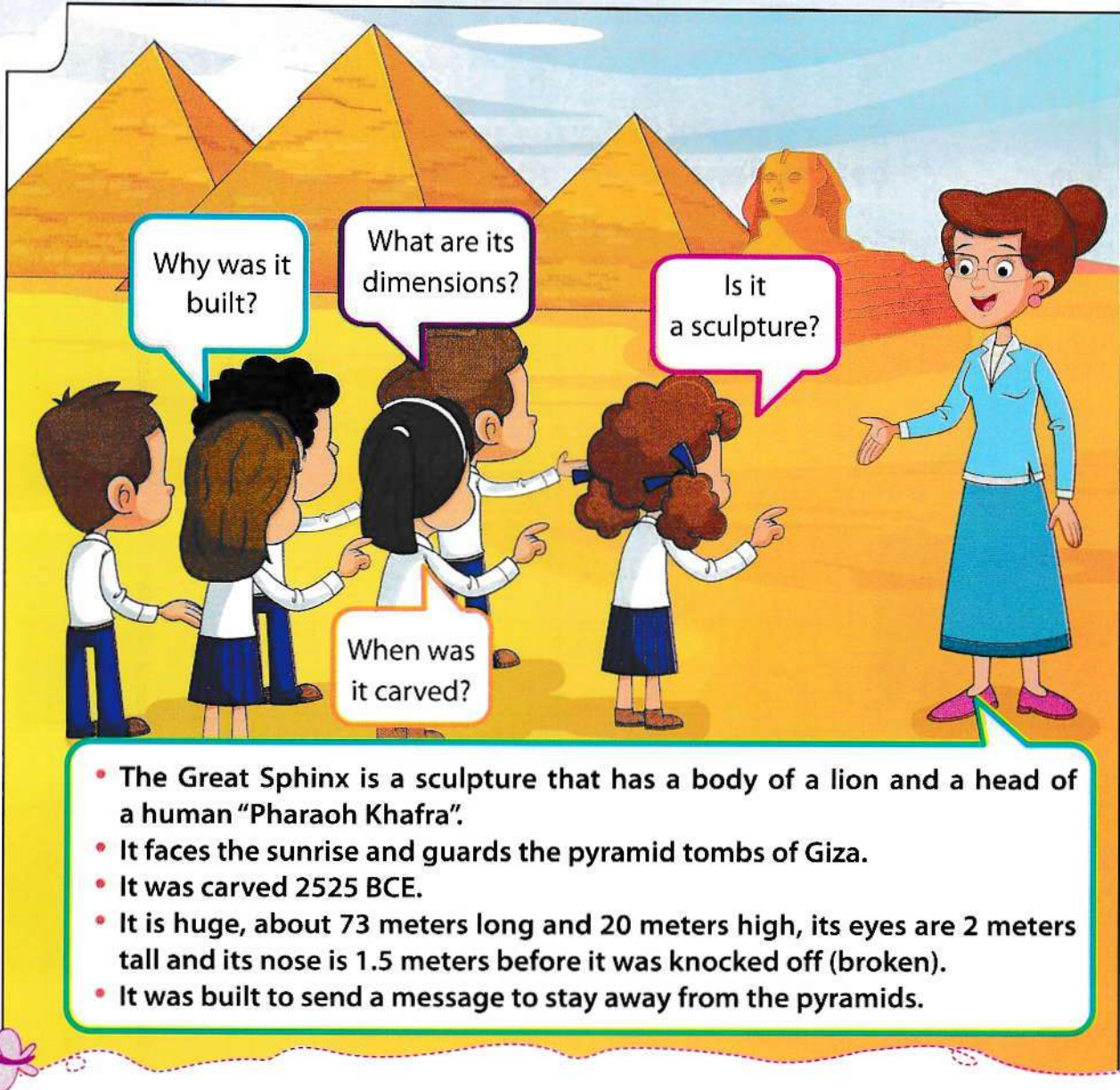


# Lesson 6

## Sculpture in Ancient Egypt

### Activity 1

Read and underline the answer for each student in the teacher's given information:

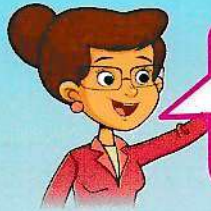


- **Parents' Tips:** Activity (1): Read the informational text with your child and let him/her understand what is meant by a "Sculpture" and learn about one of the most famous and the oldest sculptures in Egypt "Sphinx" (Abu El-Hol).
- **Aim:** Identify sculptures from Ancient Egypt.
- **Subjects integration:**
  - **English:** • Read and comprehend an informational text.
  - Ask and answer questions about key details in the story.
  - **Visual art:** Sculptures from Ancient Egypt.
- **Life Skills:** Non-verbal communication - Critical thinking - Reading.





## Modern Day Sculptures



**Sculpture** is a form of art where materials are made into three-dimensional shapes to represent something. It can be made of natural materials or a mix of different materials.

### Activity 2

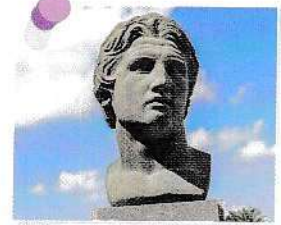
Make a search to list the similarities and differences between ancient & modern sculptures:



#### Similarities

#### Differences

-----	-----
-----	-----
-----	-----
-----	-----
-----	-----
-----	-----
-----	-----



- **Parents' Tips: Activity (2):** Assist your to use the internet to make a search to compare and contrast between the ancient and modern sculptures.
- **Aim:** Compare and contrast sculptures from ancient and modern Egypt.
- **Subjects integration:**
  - **Visual art:** Sculptures from ancient and modern Egypt.
  - **English:** Research a specific topic or question using a variety of resources.
- **Life Skills:** Non-verbal communication - Critical thinking.





## Planning my Sculpture

**Activity 3** Follow the steps to make a sculpture:

Try it yourself.



- **Parents' Tips:** Activity (3): Assist your child to understand the steps to make this sculpture, then allow him/her to plan to create his/her own sculpture.
- **Aim:** Develop a plan to create an original sculpture.
- **Subjects integration:**
  - **Visual art:** Create sculptures to imitate objects found in nature as well as from imagination.
- **Life Skills:** Communication.





From your understanding to the previous steps, use the given graphic organizer, to plan your own animal sculpture:

**The animal I will choose & its characteristics:**

.....  
.....  
.....

**Brief legend  
(story of your sculpture):**

.....  
.....  
.....

**Draw your sculpture:**



- **Parents' Tips:** Help your child to follow the steps from the previous page to plan to create his/her own animal sculpture.

# Lesson 7

## Art Reflection

### Adhesive

is a substance that sticks materials together.

### Activity

Share your sculpture with your friends to receive their feedback, then answer the following questions:

**1** Did you like your sculpture?  
\_\_\_\_\_  
\_\_\_\_\_

**2** What materials did you use?  
\_\_\_\_\_  
\_\_\_\_\_  
Why?  
\_\_\_\_\_

**3** What adhesives did you use?  
\_\_\_\_\_  
\_\_\_\_\_  
Why?  
\_\_\_\_\_

**4** Is your sculpture real or abstract?  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**5** Do your friends like your sculpture?  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**6** Is there anything you want to change?  
\_\_\_\_\_  
\_\_\_\_\_  
Why?  
\_\_\_\_\_

**Art reflection**

- **Parents' Tips:** Assist your child to share his/her sculpture with friends to receive feedbacks on his/her artwork.
- **Aim:** Give compliments to peers' work about the created sculpture.
- **Subjects integration:**
  - **English:** Write complete sentences using punctuation, prepositions, and coordinating conjunctions as appropriate.
- **Life Skills:** Verbal communication - Observation.



# Lesson 8

## Working as a Team

### Activity 1

Write one or more goals to be an effective member in your group during the team work:

**Dear team members, I will:**

1. Focus on the group's project.
2. Communicate my ideas and thoughts.
3. Work with my group to set goals.
4. ....
5. ....
6. ....



**My signature**

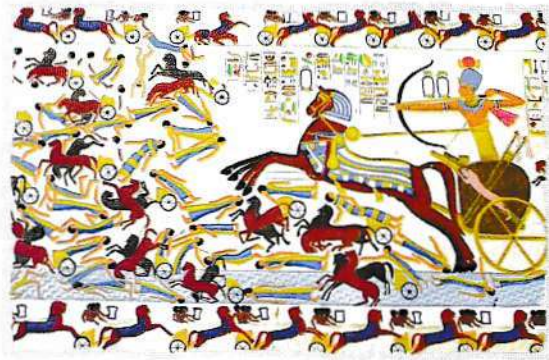
.....

- **Parents' Tips:** Activity (1): Assist your child to write more goals to be a good member in his/her group by achieving the goals successfully.
- **Aim:** Set clear goals to be a good member in your group during team work.
- **Subjects integration:**
  - **English:** Write complete sentences using punctuation, prepositions, and coordinating conjunctions as appropriate.
- **Life Skills:** Collaboration - Self management - Endurance - Verbal communication.



## Parts of the Ancient Painting

### Activity 2 Observe parts of the painting:



#### Characters

- King Ahmose.
- Egyptian soldiers.
- Hyksos soldiers.

#### Setting

- In Northern of Egypt.

#### Events

##### Beginning

King Ahmose and the soldiers trained and planned well to defeat the conquer of Hyksos.

##### Middle

King Ahmose and the soldiers fought bravely in the battle field.

##### End

Liberation of Egypt from the occupation of the Hyksos.



- **Parents' Tips:** Activity (2): Assist your child to observe and analyze the painting to get the characters, setting "time and place" and events.
- **Aim:** Analyze ancient paintings to interpret subjects and events.
- **Subjects integration:**
  - **Drama:** Describe the scenery appropriate for an existing or original scene between characters.
- **Life Skills:** Collaboration - Self management - Endurance - Verbal communication.





## Planning the Story / Dialogue

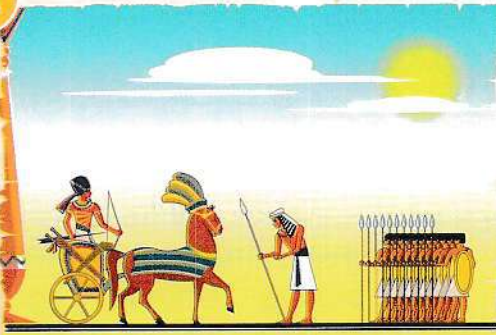
### Activity 3

Write or draw ideas for what happened in the battle field and the dialogue for each part:

#### Dialogue Rules:

1. Capitalize the first word of quoted sentence.
2. Write between quotation marks ".....", said ".....".
3. Show the moods.

A



- "Is everything well planned & prepared?!" asked King Ahmose.
- "Yes, sir", said the leader.

B





- "The glory to Egypt", said King Ahmose proudly.
- "The glory to Egypt", said the soldiers proudly.

- **Parents' Tips: Activity (3):** Assist your child to write a dialogue using the shown dialogue rules according to his/her analysis of the story in the previous activity.
- **Aim:** Create dialogue to reveal the plot of the story depicted in art.



C

Draw & Write



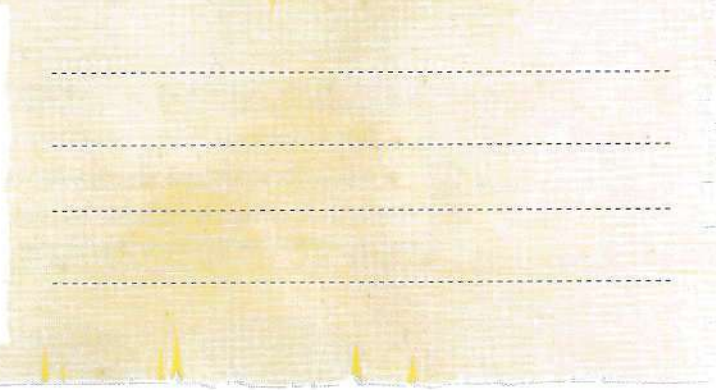

D

Draw & Write



E

Draw & Write



○ **Subjects integration:**

- **English:** Write complete sentences using punctuation, prepositions, and coordinating conjunctions as appropriate.

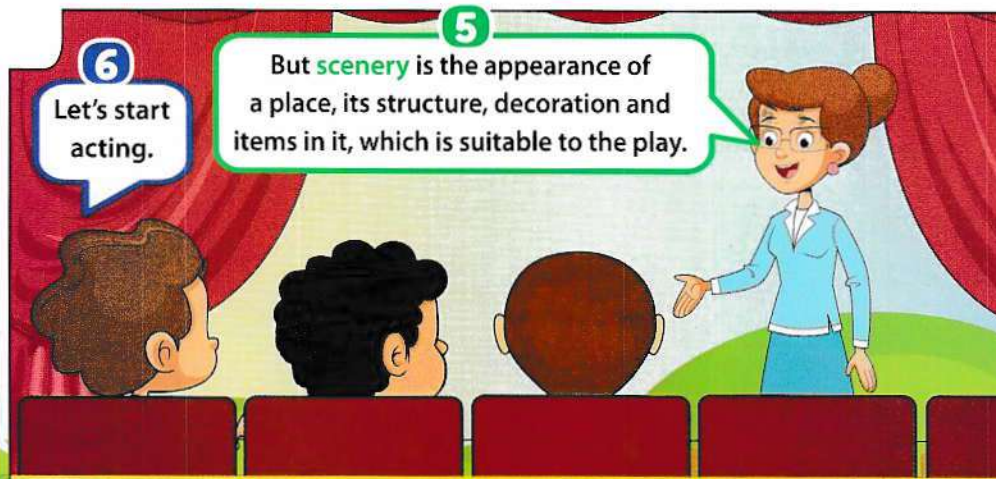
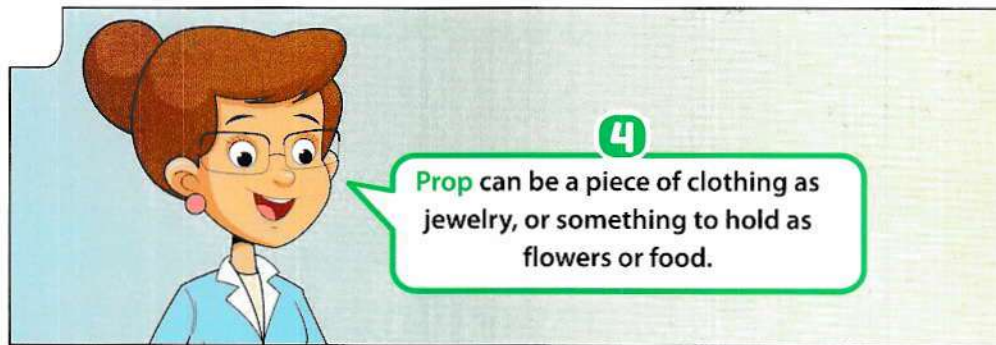
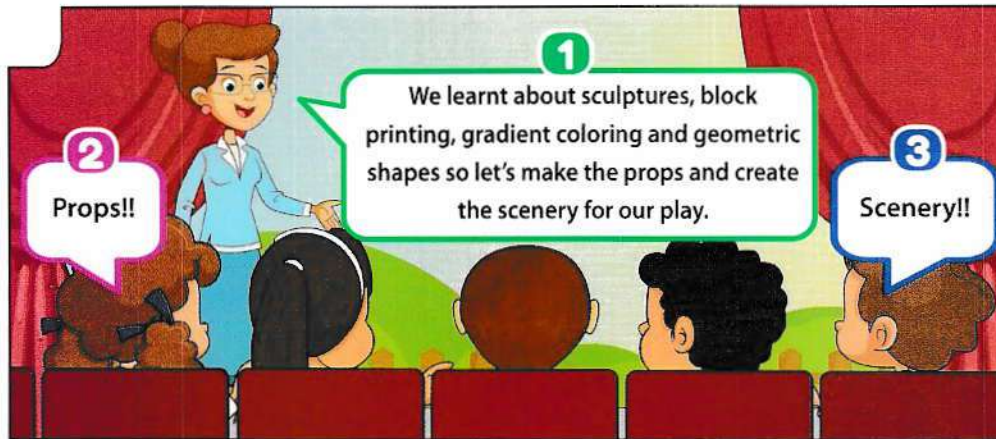
- **Drama:** Collaborate to create dialogue that reveals the plot of a play.

○ **Life Skills:** Collaboration - Self-management - Endurance.



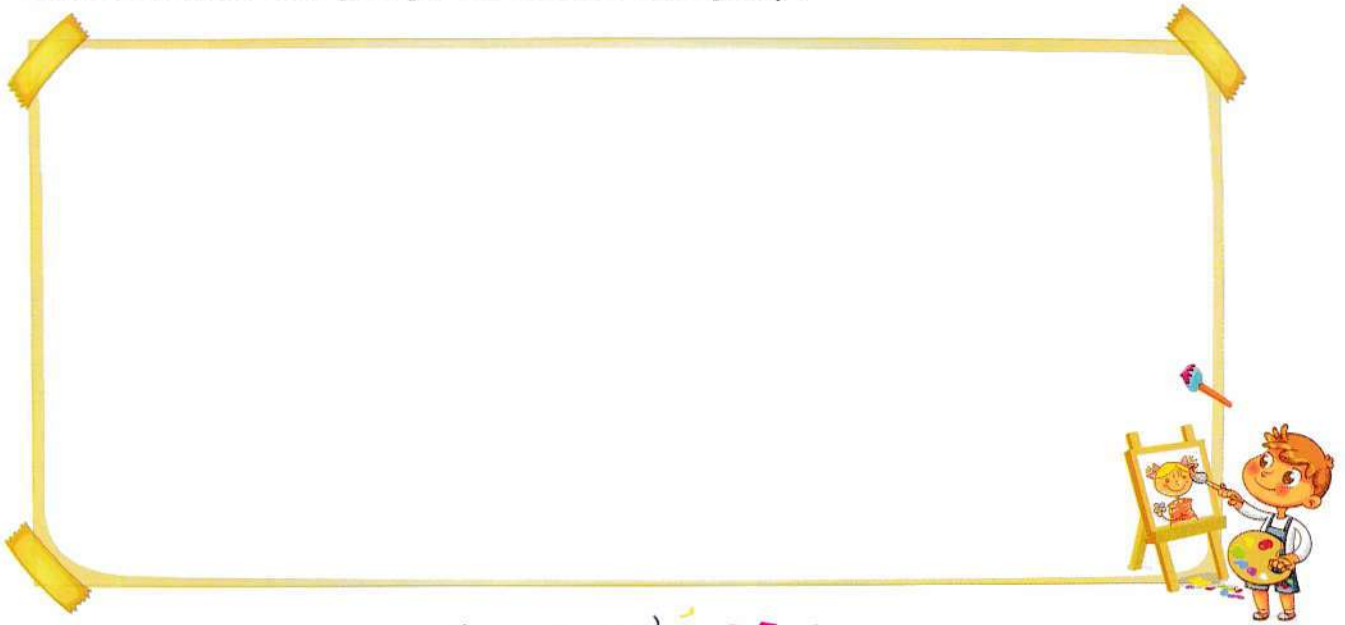
# Project

## Planning My Prop





- Use the dialogue you created in Lesson 8, draw the scenery and create the props to act in the play.



**Tick (✓) the learning outcomes you have learned through the chapter:**

- ☐ Identify different types of arts.
- ☐ Use gradient coloring, math, block printing to create an artwork.
- ☐ The cycle of fabric from natural raw materials.
- ☐ Write a biography about famous people.
- ☐ Plan to create a sculpture.
- ☐ Compare and contrast between ancient and modern sculptures.
- ☐ Create a dialogue to make a story or play.
- ☐ Know the role of technology on art.







Al-Adwaa

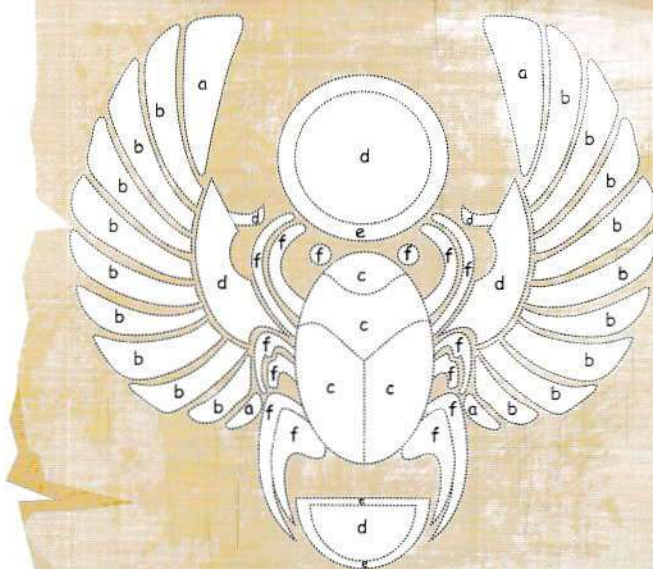
oasis



Guess the shape after coloring using the color code:

Color Code:

- a. yellow
- b. green
- c. blue
- d. red
- e. orange
- f. light blue

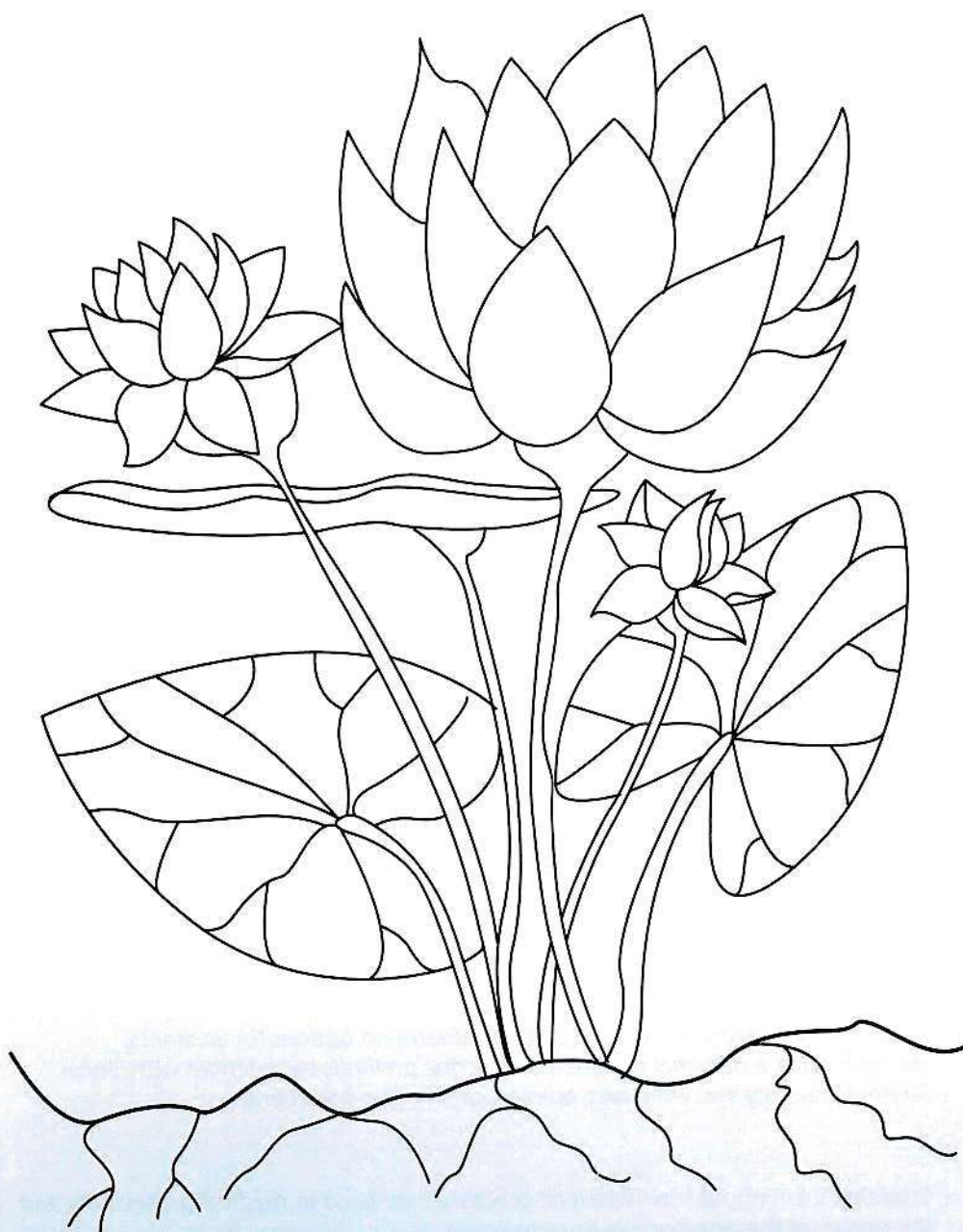


It is a/an .....





**Color the Lotus flower using the color gradients:**



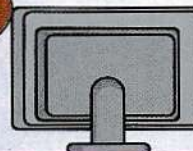


## CHAPTER

# 3

# “Origins of Medicine”

Emergency



## Chapter Overview



### Discover:

- Students read a story to discover different treatment options for an illness.
- Students write a personal narrative to describe previous experiences with illness.
- Students identify and write fact, opinion, and fiction statements.



### Learn:

- Students learn about how scientific processes are used in medical professions and the origins of this approach in Ancient Egypt.
- Students learn the difference between primary and secondary sources and the purpose of each.
- Students research how medical treatments have changed and evolved over time and how current practices are impacted by the past.



### Share:

- Students analyze elements of a narrative.
- Students make connections to the chapter topic and write a sequential fourth chapter to the story.
- Students provide feedback to others and use peer feedback to strengthen narratives.



# Pacing Guide

Lesson

Instructional Focus

Key vocabulary

Discover

1

## Students will:

- Share personal experiences.
- Write a personal narrative with a clear beginning, middle, and end.
- Identify statements as fact or opinion.

- Fact.
- Opinion.
- Treatment.



2

- Sort statements by fact, opinion, and fiction.

- Communicate an opinion through writing.
- Write fact, opinion, and fiction statements on a familiar topic.

- Fiction.
- Reliable.

## Students will:

- Describe the contributions of Imhotep to the field of medicine.
- Describe the use of facts in early medicine.
- Conduct a simple experiment to prove a fact.

- Papyrus.

3

- Identify primary sources.

- Analyze primary sources.
- Compare the reliability of different primary sources.

- Primary source.
- Verify.

4

- Recognize secondary sources.

- Use secondary sources to examine the history of medicine.
- Compare primary and secondary sources.

- Secondary source.

5

- Compare past and present hospitals.

- Identify contributions of modern-day Egyptian doctors.
- Use questioning strategies to diagnose a problem.

- Diagnose.
- Patient.

6

- Research tools used in medicine.

- Compare past and present tools used in medicine.
- Compare timelines of medical history.

- Archeologist.

7

## Students will:

- Identify traits of characters in a fictional story.
- Explain how the setting impacts the story.
- Identify possible solutions to a problem in a story.

- Solicit feedback from peers to strengthen story ideas.

- Write and illustrate the final chapter of a story.

- Feedback.

8

- Share final stories with peers.

- Create a cover for the book.

10

Share



9

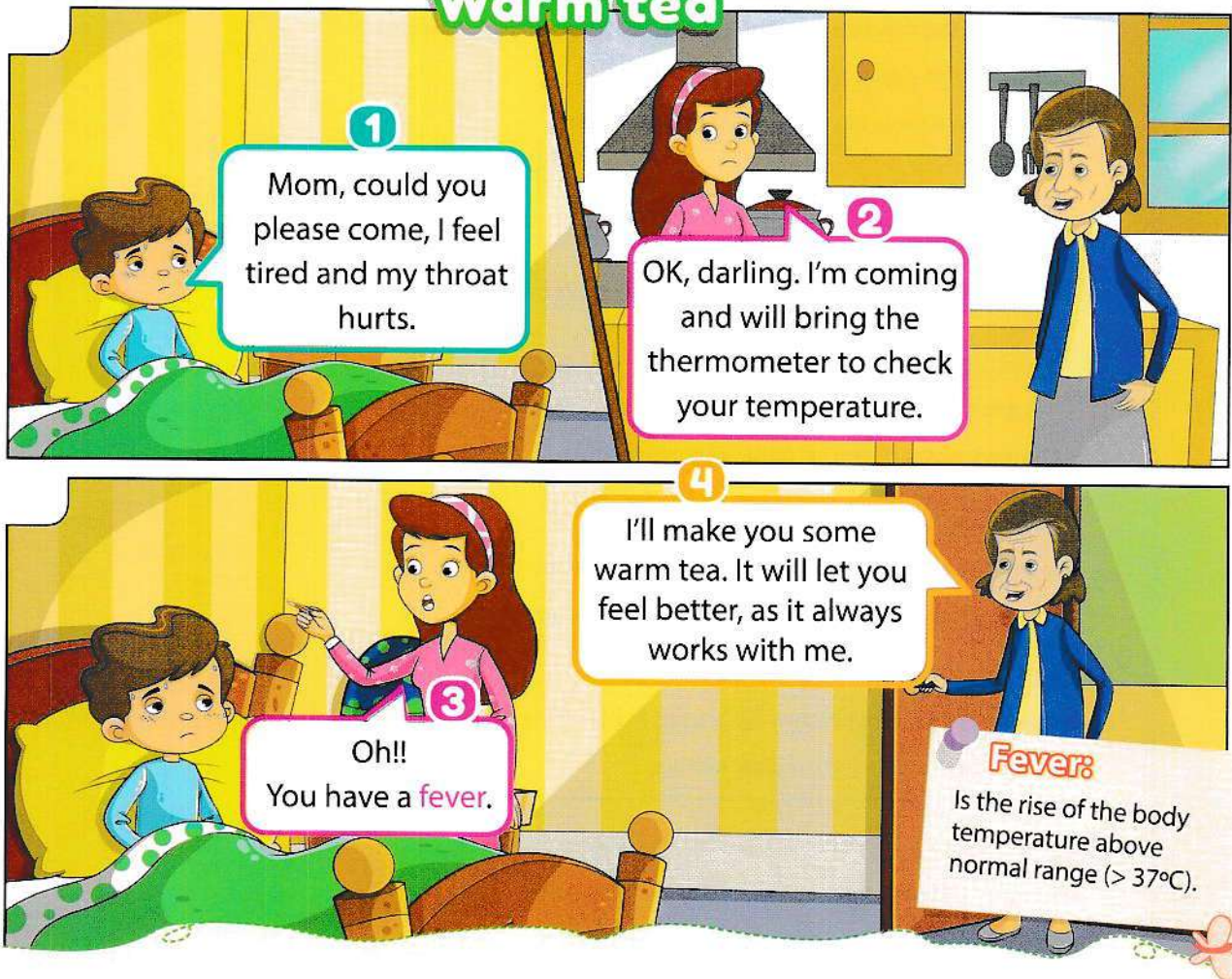


# Ramy is Sick: Part 1

The field of medicine is the field that includes things related to health and healing like nurses, doctors, researches, treatment of illness and more.

**Activity 1** Read, then answer:

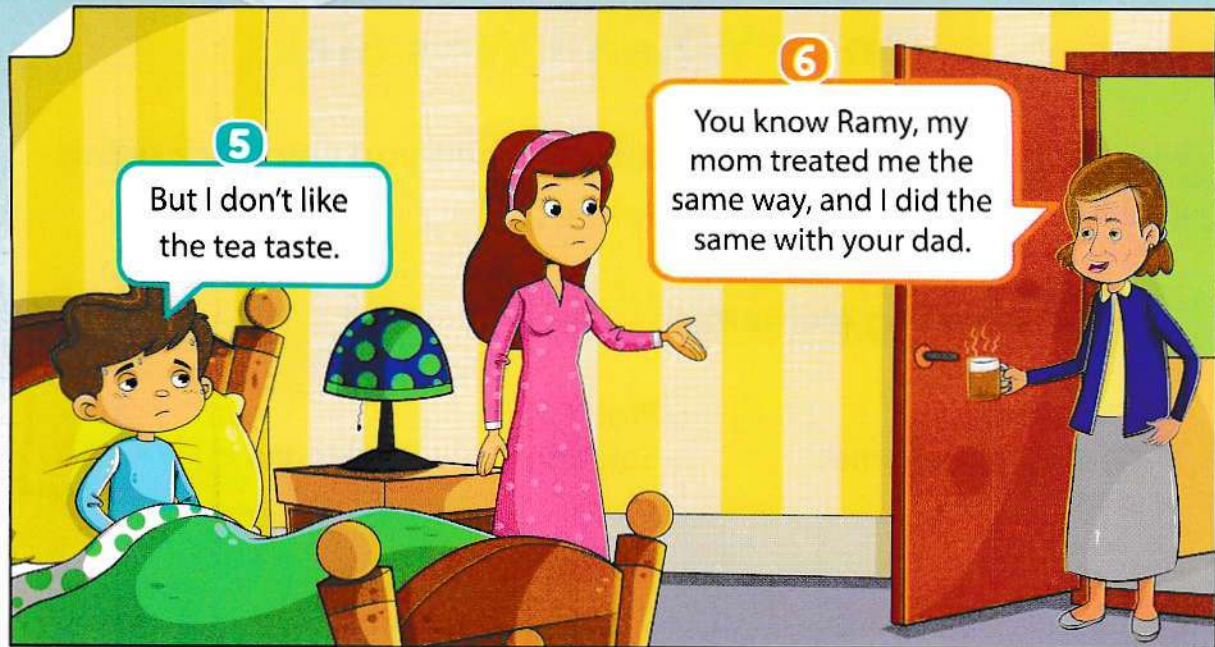
## Warm tea



- Parents' Tips: Activity (1): Assist your child to read the story conversation to know that some treatment suggestions are based on things worked with us in the past, then let him/her answer the questions.

- Aim: Identify statements as fact or opinion.



**Tick (✓):**

**1** The field of medicine is related to what we take when we are sick only.

☐ Yes

☐ No

**2** Ramy's mom used a ..... to know his temperature.

☐ thermometer

☐ nail clipper

**3** Ramy's grandma's suggestion "a sip of warm tea" to treat him.

☐ worked before

☐ didn't work before

**4** Ramy's mom and grandma tried .....

☐ to help him

☐ not to help him

**Subject integration:**

- **English:** Describe and compare characters in a story (such as their traits, motivations, or feelings) and explain how their actions contribute to the sequence of events.

- **Science:** Ask questions that can be investigated using simple tests.

• **Life skills:** Decision making - Respect for diversity - Verbal communication.





## Once When I Was Sick

### Activity 2

Write a story of yourself when you were sick using the following guidelines:

#### The story writing elements:

- Characters.
- Setting "place/ time".
- Problem.
- Solution.

Use  
the writing  
skills.



Answer the given questions to help you plan and write your story:

#### Beginning

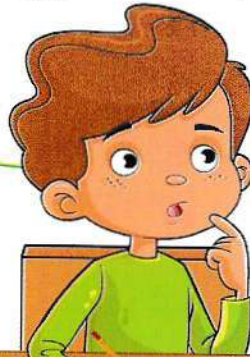
- Where were you?
- Who was with you?
- How did you feel?
- Who did you tell that you are feeling sick?

#### Middle

- What did you do to feel better?
- Who tried to help you?
- Did his/her suggestions help?

#### End

- Did you feel better at the end?



Parents' Tips: Activity (2): Help your child remember the story writing elements and let him/her use the writing skills to share his/her experience about the best way to respond to illness.

- Aims:
- Share personal experiences.
  - Write a personal narrative with a clear beginning, middle, and end.



### Characters-?!

Four horizontal dashed lines for writing.

### Setting

Four horizontal dashed lines for writing.

### Problem



Four horizontal dashed lines for writing.

### Solution



Four horizontal dashed lines for writing.



### Beginning



### Middle



### End

Eight horizontal dotted lines for writing.

Eight horizontal dotted lines for writing.

Eight horizontal dotted lines for writing.



#### Subject integration:

- English: Write complete sentences using punctuation, prepositions, and coordinating conjunctions as appropriate.

Life skills: Decision making - Respect for diversity - Verbal communication.



## Ramy is Sick: Part 2

**Activity 3** Read, then answer:

### The commercial

**1** I will bring a **cold wet towel** for your head.

**2** No mom please, I **don't like the wet towel**, because it makes me all wet.

**3**

- Headache? Body ache? Fever? It's time to feel better!!
- **No prescription needed!!**
- Go and buy **the best medicine in pharmacies.**

**5** No, darling this medicine will **make you feel drowsy**. This is a commercial way to grab the audience's attention.

**4** Mom, let's **buy this medicine** instead of this cold wet towel, please!!

- **Parents' Tips: Activity (3):** Assist your child to continue reading the second part of the story to know that as there are different methods of treatments suggested by the people around us there are also commercials that can also suggest treatments for illness that may include some facts and opinions.

- **Aim:** Identify statements as fact or opinion.





## Fact

is a true statement  
that you can prove.

**ex:** There are 7 days in a week.

## Opinion

is someone's idea  
or feeling about  
something.

**ex:** Winter is the best season.

**From your reading, underline the facts and opinions in the story (Parts 1 & 2), then write them down in the table:**

Facts	Opinions
Have a fever.	Do not like wet towel.



### Subject integration:

- **English:** Describe and compare characters in a story (such as their traits, motivations, or feelings) and explain how their actions contribute to the sequence of events.
- **Science:** Ask questions that can be investigated using simple tests.
- **Life skills:** Decision making - Respect for diversity - Verbal communication.

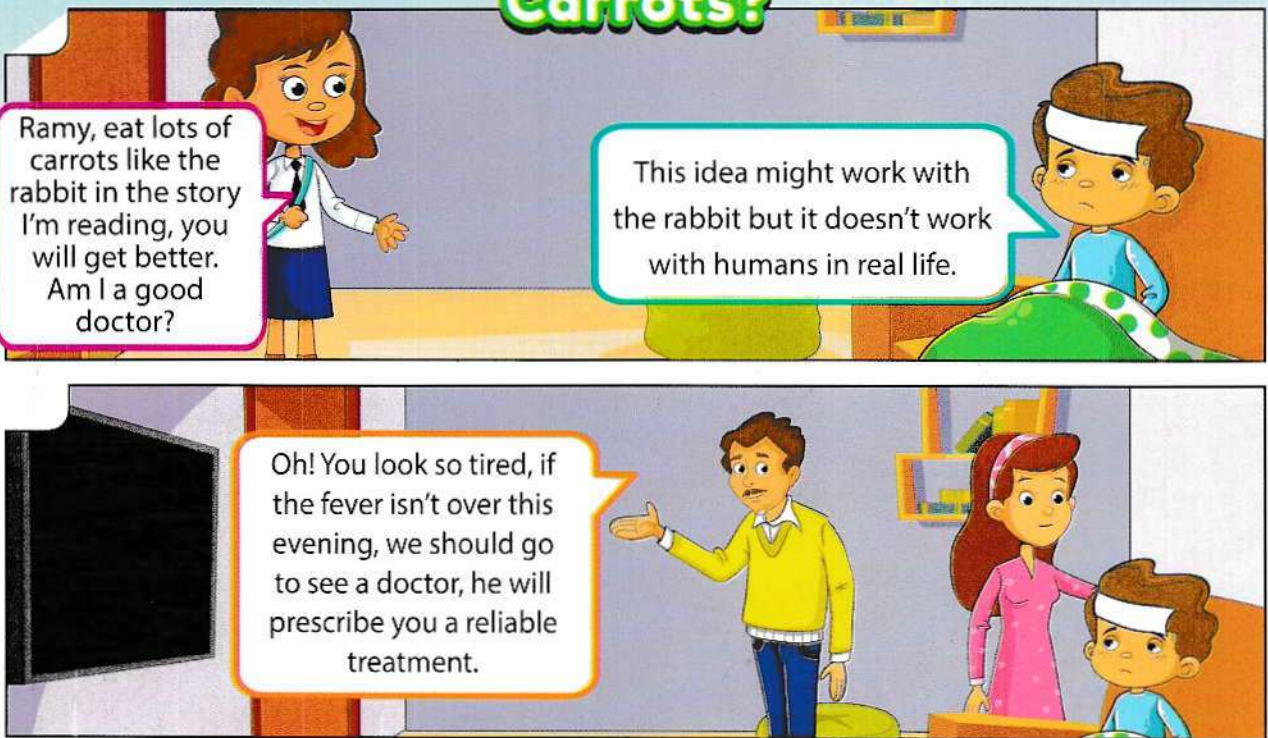


## Lesson 2

## Ramy is Sick: Part 3

### Activity 1 Read, then answer:

### Carrots?



### Tick (✓):

- 1 "Reliable" means that the information is .....  
☐ trusted ☐ not trusted
- 2 Ramy's sister's suggestion was .....  
☐ from real life ☐ a fantasy
- 3 Doctor's suggestions are based on .....  
☐ facts ☐ opinions

● **Parents' Tips: Activity (1):** Assist your child to continue reading the third part of the story and discuss with him/her that some treatment suggestions are unreal "fictional" and if the suggestions didn't work well, we should go to the doctor as his/her treatment prescription is more reliable, then let him/her answer the questions.

● **Aim:** Sort statement by fact, fiction and opinion.

● **Subject integration:**

- **English:** Describe and compare characters in a story (such as their traits, motivations, or feelings) and explain how their actions contribute to the sequence of events.

- **Science:** Ask questions that can be investigated using simple tests.

● **Life skills:** Decision making - Respect for diversity - Verbal communication.



## Treatment Options

### Activity 2

From your reading to the previous 3 story parts, identify each treatment and source of information, then classify each into a fact, fiction or opinion:

#### Fiction:

is something told or written that is not a fact.



Treatment

Source of information

Fact, Fiction, Opinion

Drinking warm tea makes sore throat better.

Grandma

Opinion

Cold wet towel on the head.

Commercial



- **Parents' Tips: Activity (2):** Assist your child to reread the three parts of the story and identify each treatment into fact, fiction or opinion and their sources to know the most reliable way to treat illnesses.
- **Aim:** Sort statements by fact, opinion, and fiction.
- **Subject integration:**
  - **English:** Answer questions about the logical connection between particular sentences and paragraphs in a text (such as comparison, cause/effect, or sequence).
  - **Science:** Ask questions that can be investigated using simple tests.
- **Life skills:** Decision making - Respect for diversity - Verbal communication.





## Fact, Fiction, Opinion

**Activity 3** Classify each statement, using the given words:

fact - fiction - opinion

- 1 March is the third month in the year. ( ..... )
- 2 I am faster than a horse. ( ..... )
- 3 Water is liquid. ( ..... )
- 4 Cats are cuter than dogs. ( ..... )
- 5 The heart pumps blood. ( ..... )
- 6 I can see well in total darkness. ( ..... )
- 7 Summer is the best season. ( ..... )
- 8 Commercials are always true. ( ..... )
- 9 Mom is elder than grandmother. ( ..... )

- **Parents' Tips:** Activity (3): Help your child read each statement, understand it & let him/her classify each into fact, fiction or opinion.
- **Aim:** Sort statements by fact, fiction or opinion.
- **Subject integration:**
  - **English:** Compare similarities and differences between the most important points on the same topic.
  - **Social studies:** Distinguish between fact, opinion, and fiction in representations of history.
- **Life skills:** Critical thinking - Decision making - Respect for diversity.



## Statement about my Health

**Activity 4** Write fact, fiction, and opinion about your health:

**Fact:**

**Fiction:**

**Topic:**

My health

**Opinion:**



Write fact, fiction, and opinion about another topic of your choice:

**Fact:**

**Fiction:**

**Topic:**

**Opinion:**



- **Parents' Tips: Activity (4):** Help your child write fact, fiction and opinion statements about his/her health and let him/her choose other familiar topic to write about.
- **Aim:** Write fact, fiction and opinion statements on a familiar topic.
- **Subject integration:**
  - **English:** Compare similarities and differences between the most important points on the same topic.
  - **Social studies:** Distinguish between fact, opinion, and fiction in representations of history.
- **Life skills:** Critical thinking - Decision making - Respect for diversity.



# Lesson 3

## Imhotep

Thousands of years ago, ancient Egyptians did not know why people were getting sick. They thought that maybe **spirits** affected the way the body works, so they prayed for healing.

### Activity 1 Read, then answer:



#### Imhotep

- Ancient Egyptian **Imhotep** was so unique, he approached sickness and injuries differently than others in his era.
- He used "**Scientific thinking**" to investigate different illnesses and treatments.
- He was the first to record **observations data**, make conclusions about different illnesses and treatments based on facts collected over time.
- He **treated over 200 diseases** during his life.
- His scientific approach became a foundation for modern medical fields.



#### Edwin Smith (1500-1700 BCE)

- The Edwin Smith Papyrus is well known with its descriptions of ancient Egyptian surgical and medical practices of Imhotep.
- It describes almost **100 terms of body parts**, around **48 injuries** and methods of their treatments.
- It contains the first written **description of the brain**.
- It explained that the **heart pumps blood** to all body parts.

- Parents' Tips: Activity (1): Assist your child to read & learn that ancient Egyptians made contributions throughout the history like Imhotep in medicine field that was described in the Edwin Smith Papyrus.
- Aim: Describe the contributions of Imhotep to the field of medicine and the use of facts in early medicine.



**Imhotep records begin with the phrase:**

"An **ailment** I will fight with." or

"An **ailment** I will handle." or

"An **ailment** for which nothing can be done."

**Ailment:**

is a sickness  
(or a disease).

**Analyze the information in the previous context to complete the 3-2-1 reflection template:**

**Write 3**

**Learned Facts:**

1

-----

-----

2

-----

-----

3

-----

-----

**Write 2**

**Interesting Facts:**

1

-----

-----

2

-----

-----

**Write 1**

**Opinion or Fiction:**

1

-----

-----



**Subject integration:**

- **English:** Describe and compare characters and explain how their actions contribute to the sequence of events.

- **Social studies:** Distinguish between fact, opinion, and fiction in representations of history.

**Life skills:** Critical thinking - Problem solving - Verbal communication.

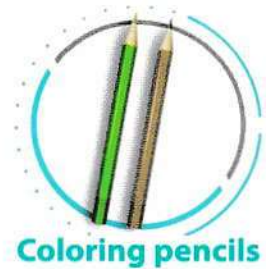


## Bread Experiment

### Experiment Time

Let's do an experiment to investigate the effect of germs on bread over time and record conclusions based on evidence:

### Tools

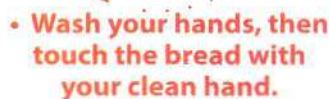
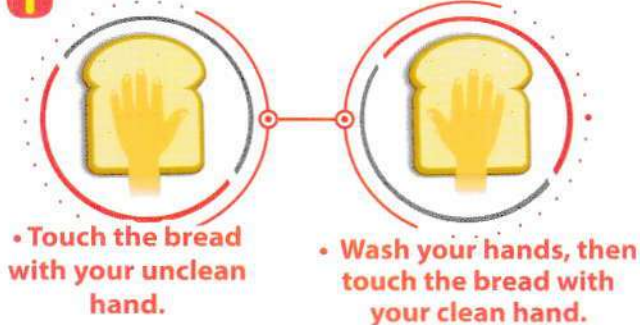


### Note:

Fresh baked bread forms mold faster than preserved one.

### Steps

1



2



- **Parents' Tips:** Assist your child to follow the steps to perform this activity to prove that germs can be spread by touching things so we have to wash our hands regularly & to know that medical knowledge is based on facts from provable evidences, then let him/her record their observations & predict the conclusion according to it.
- **Aim:** Conduct a simple experiment to prove a fact based on evidence.





## Observation

Draw and color your observations for the bread slices every day for a week:

<b>Day 1</b>		<b>Day 2</b>		<b>Day 3</b>	
Dirty hands	Clean hands	Dirty hands	Clean hands	Dirty hands	Clean hands
<b>Day 4</b>		<b>Day 5</b>		<b>Day 6</b>	
Dirty hands	Clean hands	Dirty hands	Clean hands	Dirty hands	Clean hands
<b>Day 7</b>					
Dirty hands	Clean hands				

**Note:**

Facts in science and medicine are proved by looking for evidence.

## Conclusion

Tick (✓):

### \* Based on evidence:

- ☐ Clean hands spread germs so the bread gets moldy.
- ☐ Dirty hands spread germs so the bread gets moldy.



### Subject integration:

- English: Ask and answer questions about the experiments.
- Science: Perform an experiment and construct an explanation with evidence (such as observations, patterns, and data).

- Life skills: Critical thinking - Problem solving - Self-management - Decision making - Verbal communication.



## Images for Timeline

### Activity 2

By the end of this chapter, return back to this page and record the date (time period) of each image:



According to the recorded dates data, create a timeline:

- **Parents' Tips: Activity (2):** Assist your child to fill in the time period for each image and create the suitable timeline at the end of this chapter after learning more about the history of medicine.
- **Aim:** Design timeline using pictures to describe and remember important events.
- **Subject integration:**
  - **English:** Describe and compare characters and explain how their actions contribute to the sequence of events.
  - **Social studies:** Distinguish between fact, opinion, and fiction in representations of history.
- **Life skills:** Critical thinking - Problem solving - Verbal communication.



# Lesson 4

## The Ebers Papyrus

### Activity 1 Read and learn:



#### Primary source:

is an artifact from the timeline being studied, an eyewitness account or material close to the original source as possible. (ex: The Ebers & Edwin Papyri)

#### "The Ebers Papyrus" (1550-1538 BCE)

- Named after the famous Egyptologist, George Ebers.
- It has an entire section called "**Book of Hearts**" that describes **how blood reaches** every part of the human body through **vessels**.
- It has both **scientific** and **magical spells** for illnesses and their cures.
- It includes over **842 cures** for illnesses and injuries.

#### Ancient Cure "Headache Cure"

- 1 **Mash** "Herbs + Seeds + Flour + Other ingredients + Water".

#### Mortar & Pestle

(a tool used to grind & mix the ingredients together)



- 2 **Then apply to head.**

- **Parents' Tips: Activity (1):** Assist your child to define primary sources such as the Ebers Papyrus, then read its description to know about the origin of medicine in Egypt.
- **Aim:** Identify and analyze primary sources.
- **Subject integration:**
  - **English:** Describe and compare characters and explain how their actions contribute to the sequence of events.
  - **Social studies:** Distinguish between fact, opinion, and fiction in representations of history.
- **Life skills:** Critical thinking - Problem solving - Verbal communication.





Learning science and history are similar because both depend on evidence.

- Scientists examined ancient Egyptian mummies using **X-rays** and other **modern equipment** and found direct evidence of surgeries described in the papyri. Also samples of bones, hair and teeth indicate that some of the cures listed in the papyri were **effective**.

### Cross-checking:

is a variety of sources that help us collect a reliable picture of history.

## Activity 2 From your reading, answer:

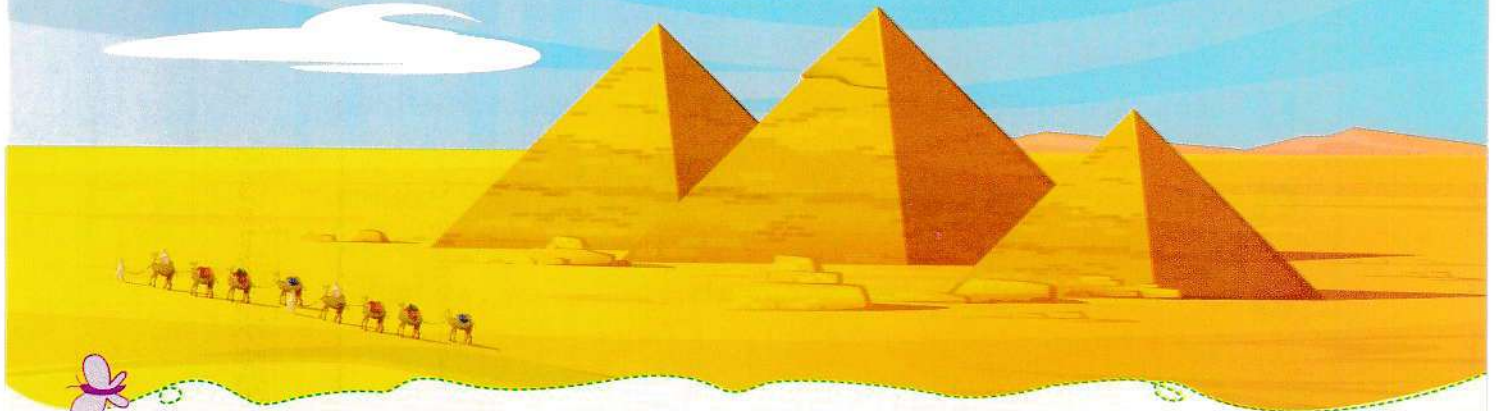
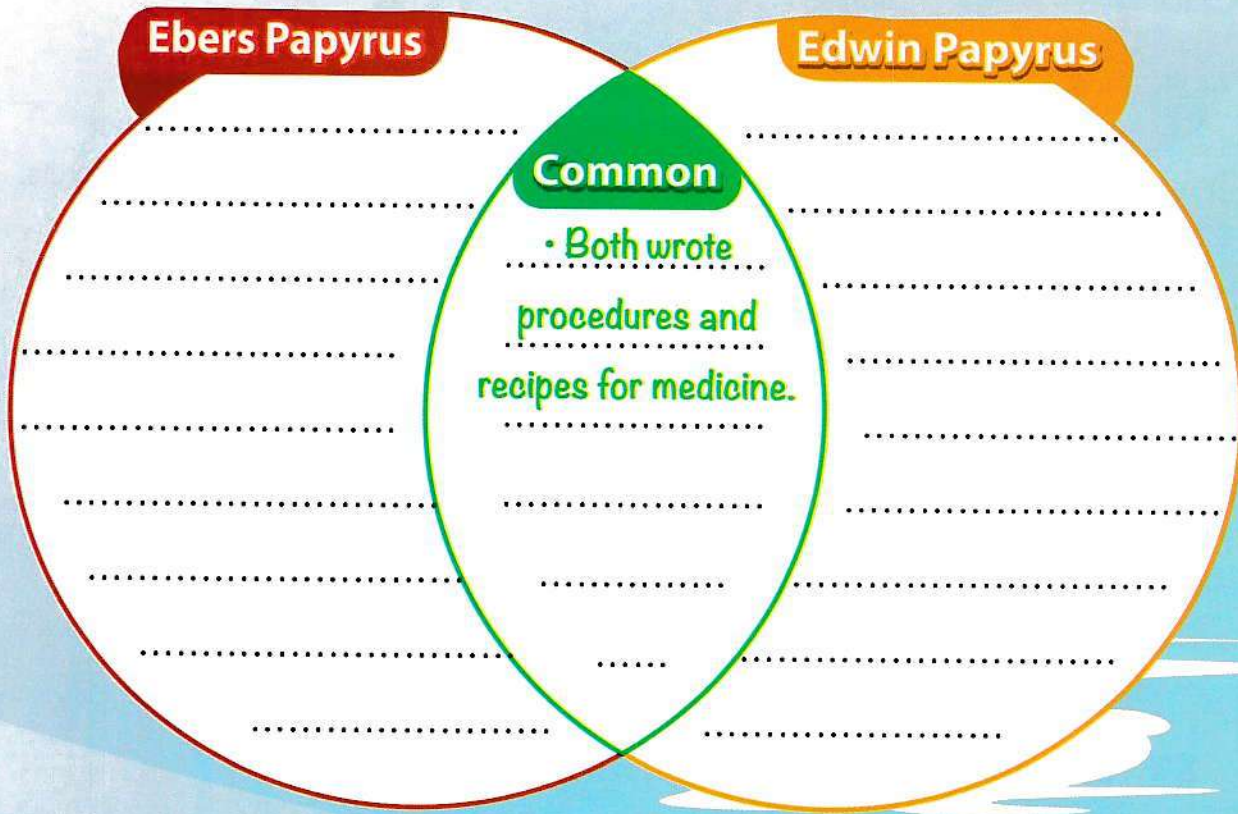
- 1 Ebers and Edwin Papyri are ..... sources.  
☐ primary ☐ secondary
- 2 Ebers Papyrus has a section called "Book of ....."  
☐ Brains ☐ Hearts
- 3 Ebers Papyrus has both ..... and ..... spells for illnesses and their cures.
- 4 ..... gives a reliable picture for history.
- 5 Scientists used ..... and modern equipment to examine ancient mummies.

- **Parents' Tips: Activity (2):** Assist your child to read & understand the above text & the meaning of the term cross-checking, then let him/her compare and contrast between different primary sources like "the Ebers and Edwin Papyri" using the Venn diagram.
- **Aim:** Compare the reliability of different primary sources.





Compare between the Ebers and Edwin Papyri using the Venn diagram:



○ **Subject integration:**

- **English:** Describe and compare characters in a story and explain how their actions contribute to the sequence of events.

- **Social studies:** Demonstrate how two or more current or historical events are connected.

○ **Life skills:** Critical thinking - Problem solving.



# Lesson 5

## Primary and Secondary Sources

### Activity 1 Read, then answer:



The description of the Ebers Papyrus is a secondary source of information as we didn't look at it directly but we read its description written by someone else.

### Secondary Source:

is anything that describes, interprets, evaluates or analyzes information from a primary source.

### Examples of secondary sources:

- Descriptions of artworks.
- Biography.
- Encyclopedias and textbooks that summarize ideas and information.
- Books, articles and documents that combine information on topics.

### Tick (✓):

- 1 A biography about Taha Hussein is a ..... source.  
☐ primary ☐ secondary
- 2 A government document about the Aswan High Dam is a ..... source.  
☐ primary ☐ secondary
- 3 Secondary sources are direct information about something.  
☐ Yes ☐ No
- 4 An encyclopedia article about giraffes is a ..... source.  
☐ primary ☐ secondary
- 5 An interview with Dr. Magdi Yacoub is a ..... source.  
☐ primary ☐ secondary

- Parents' Tips: Activity (1): Assist your child to define the secondary sources, know some examples and how they are important to describe the primary sources that we can't reach.
- Aim: Recognize secondary sources.



Tick (✓) to classify the following sources into “Primary” & “Secondary” sources:

Source	Primary	Secondary
Textbooks	<input type="checkbox"/>	<input type="checkbox"/>
Artifacts	<input type="checkbox"/>	<input type="checkbox"/>
A biography	<input type="checkbox"/>	<input type="checkbox"/>
A movie recommendation	<input type="checkbox"/>	<input type="checkbox"/>
A letter	<input type="checkbox"/>	<input type="checkbox"/>
Government documents	<input type="checkbox"/>	<input type="checkbox"/>
A map	<input type="checkbox"/>	<input type="checkbox"/>
A photograph	<input type="checkbox"/>	<input type="checkbox"/>
An article written after an event	<input type="checkbox"/>	<input type="checkbox"/>



- **Subject integration:**
  - **Social studies:** Distinguish between primary and secondary sources.
- **Life skills:** Critical thinking.



## Ramy's Dream

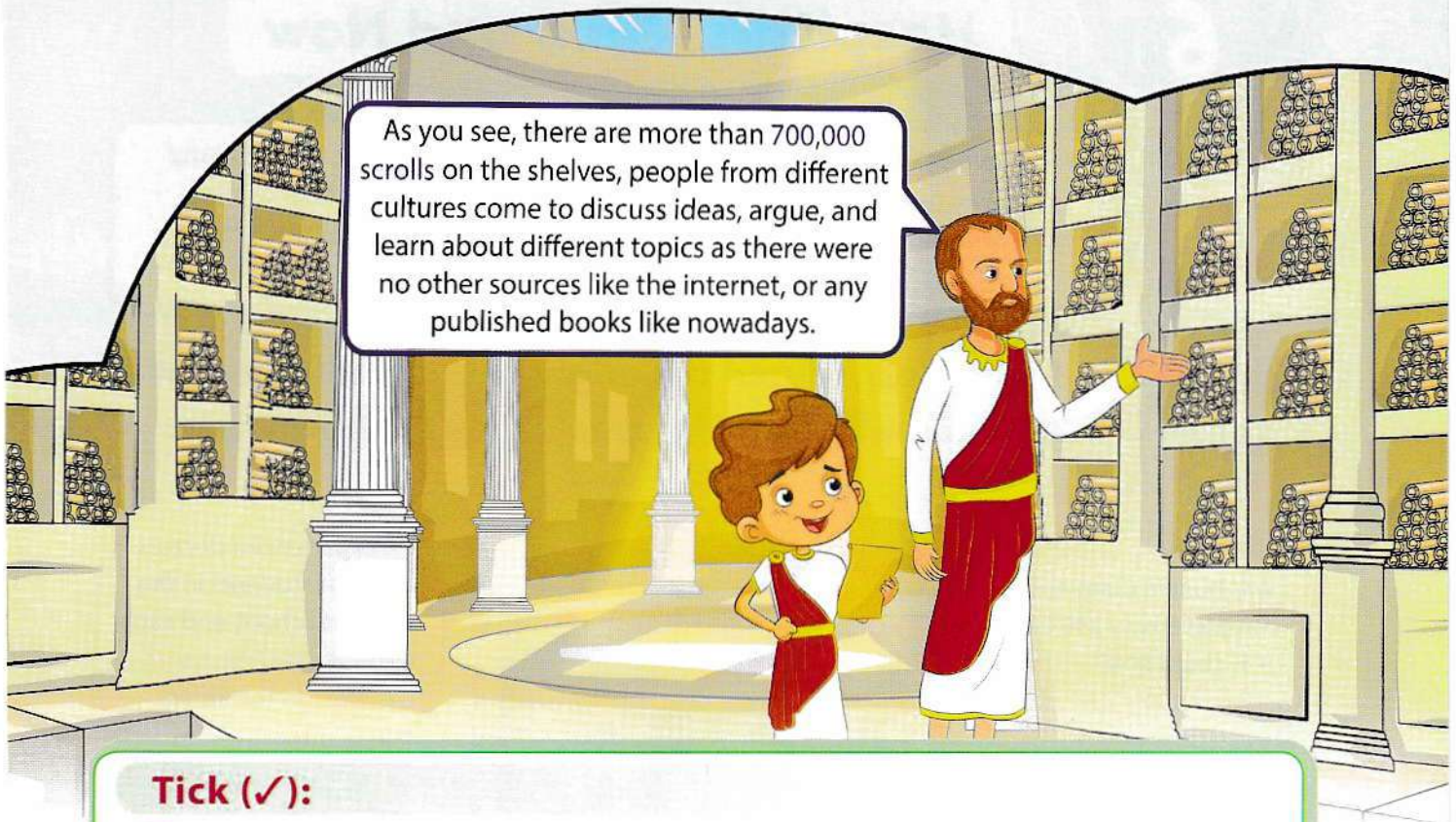
### Activity 2

Read to learn about the "The Great Library of Alexandria", then answer:

The Great Library of Alexandria **no longer exists** for more than 1000 years.







As you see, there are more than 700,000 scrolls on the shelves, people from different cultures come to discuss ideas, argue, and learn about different topics as there were no other sources like the internet, or any published books like nowadays.

**Tick (✓):**

- 1 The Great Library of Alexandria was an important place to learn at in the past.  
☐ Yes ☐ No
- 2 Galen's documents about the Great Library of Alexandria are considered .....  
☐ primary sources ☐ secondary sources
- 3 People from different cultures didn't learn anything in the library.  
☐ True ☐ False
- 4 In the past there were the internet and published books.  
☐ True ☐ False



**Search about more information about the Great Library of Alexandria.**

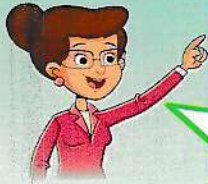


- **Parents' Tips: Activity (2):** Assist your child to read the conversation between Ramy & Galen, and discuss with him/her why the Great Library of Alexandria was an important place, then let him/her answer the questions.
- **Aim:** Use secondary sources to examine the history of medicine.
- **Subject integration:**
  - **English:** Describe and compare characters and explain how their actions contribute to the sequence of events.
  - **Social studies:** Compare past and present events in the local community.
- **Life skills:** Critical thinking - Collaboration.



# Lesson 6

## Hospitals Then and Now



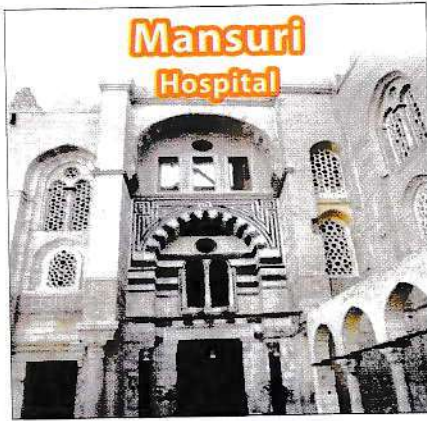
When we get very sick, we must go to the **hospital**, a place where many **doctors, nurses, and other specialists** who are **trained to take care of you**. Did you know that many aspects of **modern hospitals** trace their **origins to Egypt**?

### Activity 1

**Read & learn about the origin of hospitals in Egypt that has influenced hospitals today, then answer:**

#### Then

#### Mansuri Hospital



- The **largest hospital** was built in Cairo and completed in 1248 CE.
- It could hold **more than 4000 patients**.

- It had different **areas** such as a **huge lecture hall**, a **school**, an **orphanage**, a **mosque** for Muslim patients and a **chapel** for Christian patients.

- Inspectors checked the **cleanliness** of the hospital and rooms every day, and gave the patients **sanitized hospital clothing and bedsheets** to **prevent infection**.

- Experienced doctors taught students in the medical school, and each had his **own handwritten books** in the library.

- Doctors recorded their observations on the patients' card, and they **treated** them **based on** their **observations**, and details were discussed weekly.

- Patients were set on a **special diet**, **depending on their cases**. The food included meat, fresh fruit or vegetables.

- **Parents' Tips: Activity (1):** Assist your child to read & understand how the hospitals were in the past and nowadays, then discuss with him/her how the past hospitals influenced hospitals to be today.
- **Aim:** Compare past and present hospitals.





- **Aswan** Heart Center was opened in 2009, located along the banks of the Nile.
- A new center is also being built in **Cairo**.

- It has the **latest technologies**.
- They conduct advanced researches and share what they learn in scientific journals.

### Now

#### Magdi Yacoub Global Heart Foundation

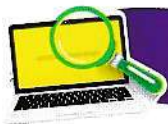


- Today, hospitals have **pharmacies**, **laboratories**, **nurseries**, **recovery rooms** and **physical therapy**.

- Today, hospitals have organized **medical** professional stuffs and **health workers** (technicians & dietitians).
- They have many departments as **surgeries**, **pediatrics**, etc.

- Many hospitals **partner** with **universities**, where **doctors share their knowledge and skills** with students through real-life situations.

- It has **gardens** to provide **peaceful setting** for patients to heal after illness and surgeries.



**Search about different careers related to the medical fields, different departments in hospitals and what they do.**



#### Subject integration:

- **English:** Compare similarities and differences between the most important points and key details presented in two texts on the same topic.
- **Social studies:** Compare past and present situations in the local community.

- **Life skills:** Empathy - Verbal communication.



**From your previous reading, tick (✓):**

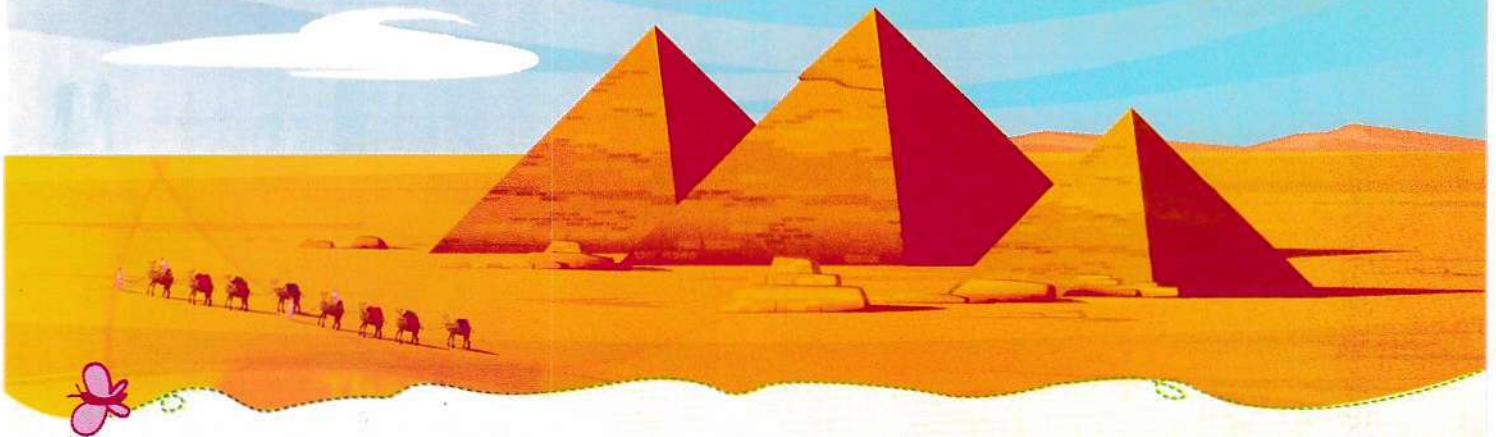
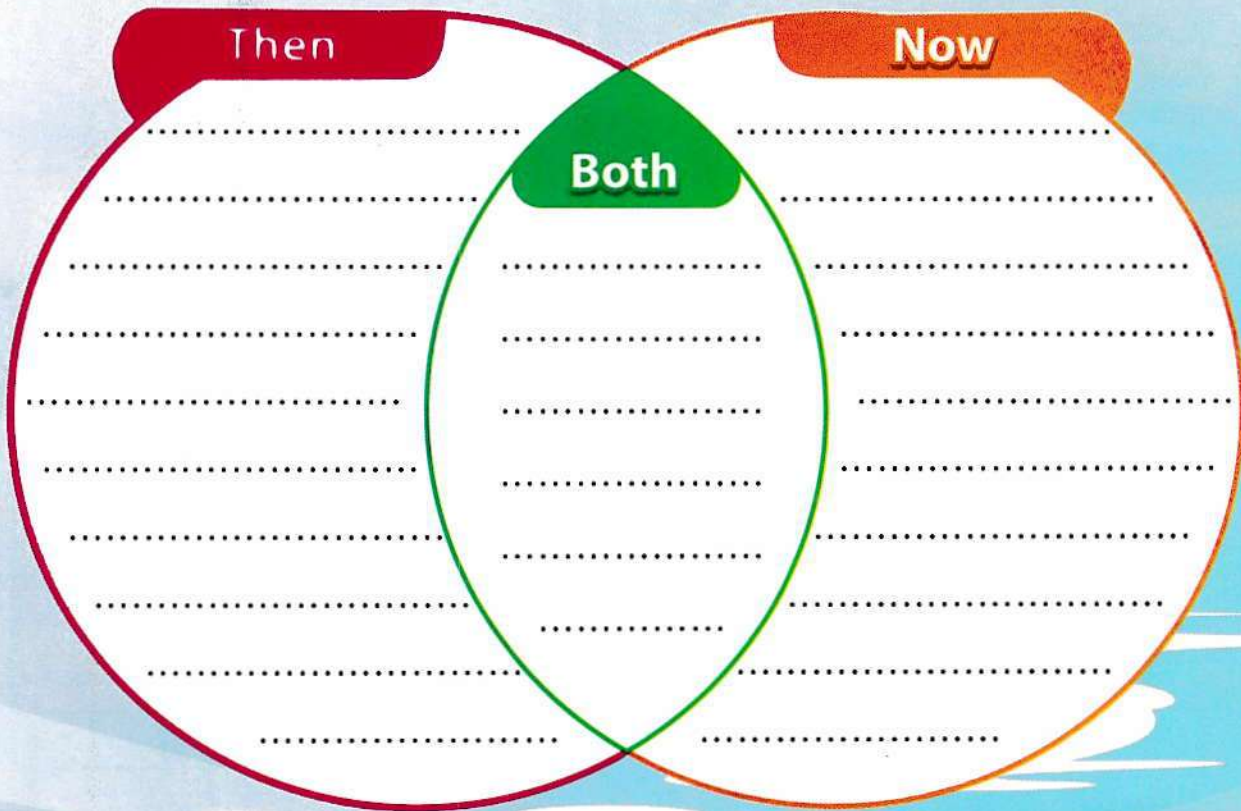
- 1 Modern hospitals can treat people more than old hospitals.  
☐ True ☐ False
- 2 Hospitals in the past had different areas such as .....  
☐ orphanages ☐ clubs
- 3 Patient's diet in the past was all alike.  
☐ True ☐ False
- 4 Hospitals in the past had modern equipment to help doctors.  
☐ True ☐ False
- 5 Modern hospitals have ..... departments.  
☐ few ☐ many
- 6 In modern hospitals, medical staffs are .....  
☐ organized ☐ not organized
- 7 Nowadays many hospitals partner with .....  
☐ universities ☐ hotels

● **Parents' Tips: Activity:** Discuss with your child the difference between the past & modern hospitals, then let him/her answer the above questions.



**Activity 2**

**Compare between the hospitals then and now using the Venn diagram:**



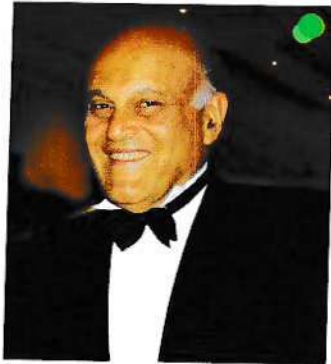
- **Parents' Tips: Activity (2):** Assist your child to write the similarities and differences between hospitals now and in the past using the Venn diagram.
- **Aim:** Compare past and present hospitals.
- **Subject integration:**
  - **English:** Compare similarities and differences between the most important points and key details presented in two texts on the same topic.
  - **Social studies:** Compare past and present situations in the local community.
- **Life skills:** Verbal communication.





The contributions of past Egyptians in medicine field influenced nowadays doctors. There are also Egyptians today who continue to make significant contributions to medicine, such as Sir Magdi Yacoub & Dr. Nagwa Abdel Meguid.

**Search about nowadays doctors like “Sir Magdi Yacoub” & “Dr. Nagwa Abdel Meguid” & their contributions in medicine.**



**Field** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Awards** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Contributions** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



**Field** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Awards** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Contributions** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

- **Parents' Tips:** Assist your child to use the internet to make a search for the significant contributions of modern doctors in medicine that were influenced by the past Egyptians, then complete the charts.
- **Aim:** Identify contributions of modern-day Egyptian doctors.
- **Subject integration:**
  - **English:** Research a specific topic or question using a variety of resources.
  - **Vocational fields:** Collect information on how local occupations contribute to the community to protect and conserve the environment.
- **Life skills:** Communication.





## Patient and Doctor

### Activity 3 Let's act as a doctor and patient and fill in the report:



I wish to be a doctor when I grow up!!  
I will be gentle to my patients and **ask them questions**, to **gather information**, and **record notes** to be able to **diagnose** their complains, then decide if the patient just needs a prescription and some rest or needs to stay in the hospital for further needs and follow up.

Patient's name: .....

Age: ..... Gender: .....

#### Questions:

• How are you feeling?

.....

• What part of your body are you complaining from?

.....

• How often does it hurt?

.....

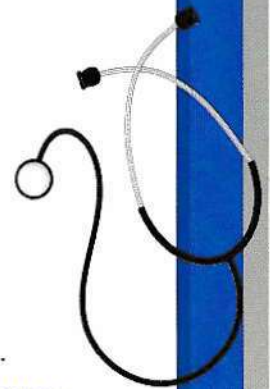
• What treatments have you tried already?

.....

• Ailment:

• Treatment:

.....



- **Parents' Tips:** Activity (3): Discuss with your child the questions that a doctor can ask to diagnose the patient, then let him/her act as a doctor and practice using the given questions to diagnose illness or injury.
- **Aim:** Use questioning strategy to diagnose illness or injury.
- **Subject integration:**
  - **English:** Write narratives to express real or imagined experiences, using descriptive details.
  - **Science:** Construct an explanation with evidence (such as observations, patterns) and/or data.
- **Life skills:** Collaboration - Empathy - Writing.



# Lesson 7

## Medical Tools

### Activity 1

**Read & learn about the origin of medical tools in Egypt, then answer:**

I am an **archeologist**. I examine carefully the places where people used to live long ago, using the discovered **artifacts** and **mummies**.



When they discovered the tomb of Qar who was a doctor during the Sixth Dynasty of Egypt, they found the oldest metal surgical tools in the world dated between 2350 to 2180 BCE. Now they are preserved in Imhotep museum in Saqqara. And by learning science and technology ancient Egyptian tools are improved.

### Tick (✓):

- 1 ..... study the past artifacts and mummies.  
☐ An archeologist      ☐ An architect
- 2 Modern medical tools have origin from the past.  
☐ True      ☐ False
- 3 Teachers discover ancient artifacts.  
☐ True      ☐ False



### Search about the tools used in medicine.

- **Parents' Tips: Activity (1):** Assist your child to know how ancient Egyptian artifacts were discovered and by whom. Assist him/her to know that modern medical tools have ancient origins and by technology they are improved.
- **Aim:** Research tools used in medicine.
- **Subject integration:**
  - **Science:** Construct an explanation with evidence (such as observations, patterns) and/or data.
  - **Vocational field:** Identify examples of various occupations in personal networks.
- **Life skills:** Decision making.



**Activity 2**

Classify each medical tool according to its time of invention in the “past” or “present”:

**Otoscope**

Used to look at ears.

**Stethoscope**

Used to listen to your heart and lungs.

**Thermometer**

Used to know your temperature and if it is high, this may be a sign of infection.

**Blood pressure cuff**

Measures how hard your heart is pumping.

**Syringe and ampoule**

Used to give shots.

**X-rays**

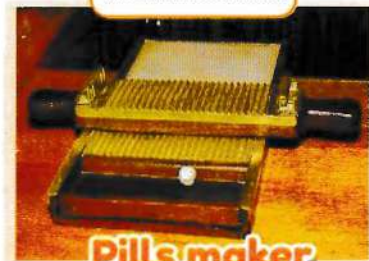
Used to look at bones inside the body.

**Saws**

Used for surgeries.

**Surgical tools**

Used for surgeries.

**Pills maker**

Used to make pills.



- **Parents' Tips: Activity (2):** Assist your child to learn about the given medical tools and identify the use of each, then let him/her use his/her critical thinking to classify them to past and present.
- **Aim:** Compare past and present tools used in medicine.
- **Subject integration:**
  - **Social studies:** Compare past and present tools in the local community.
- **Life skills:** Decision making - Critical thinking.



## Activity 1

Complete the organizer to communicate what you have learned in the story parts in this 3-2-1 template:

Write 3

Learned Facts:

1

2

3

Write 2

Interesting Facts:

1

2

Write 1

Opinion or Fiction:

1

- **Parents' Tips:** Activity (1): Help your child fill in the organizer to communicate with others what he/she had learned in "Ramy is Sick" story parts.
- **Aim:** Communicate new learnings.
- **Subject integration:**
  - **English:** Describe and compare characters and explain how their actions contribute to the sequence of events.
  - **Social studies:** Distinguish between fact, opinion, and fiction in representations of history.
- **Life skills:** Critical thinking - Problem solving - Verbal communication.



## Story Elements

### Activity 2

Reread the first three parts of the story “Ramy is Sick” and fill the graphic organizer to help you recall the important details of the story that will help you plan to write the “Fourth part”:

Write the characters and their traits.

### Characters

---

---

---

---

---

### Setting

How do the time and the place affect the story?

---

---

---

---

---

Identify them as fact, fiction, opinion, primary or secondary sources.

### Problem (conflict)

---

---

---

---

---

### Possible solutions

---

---

---

---

---

○ **Parents' Tips: Activities (2 & 3):** Let your child fill in the organizer to plan for writing the fourth part of “Ramy is Sick” story by clearing the characters and their traits, the setting and how it affects the story, the events using the temporal words “first, then, next and finally”, to help finding a solution to the conflict we have.



## Story Planning

### Activity 3

Fill the graphic organizer to plan the characters, setting, and the events you will write about in the fourth part:

**Temporal words:**  
means related to time to help communicate the sequence of events (such as: First, Then, Next, Finally).

#### Characters

#### Setting

First

Then

Finally

Next

- **Aims:**
  - Identify traits of characters in a fictional story.
  - Identify the possible solutions to a problem in a story.
- **Subject integration:**
  - **English:** Write complete sentences using punctuation, prepositions, and coordinating conjunctions as appropriate.
- **Life skills:** Decision making - Respect for diversity - Verbal communication.

## Peer Feedback

## Activity 1

Share with a friend your story plan, then write his/her compliment and ask questions to help you write the fourth part of the story "Ramy is Sick".

Compliment

Questions

Characters

Setting

Solution

Events



- **Parents' Tips: Activity (1):** Assist your child to share his/her story plan with his/her friends to get feedbacks.
- **Aim:** Solicit feedback from peers to strengthen story ideas. and use them to improve his/her writing for the fourth part of the story "Ramy is Sick".
- **Subject integration:**
  - English: Review and revise personal writing to strengthen it.
- **Life skills:** Accountability - Communication.





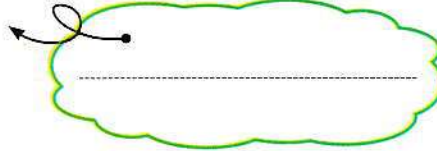
## Ramy is Sick: Part 4

### Activity 2

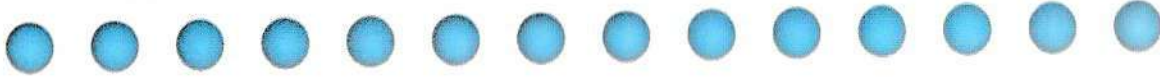
Write the "fourth part" the end of the story using your story plan and your friends' feedback to improve your writing:

Use your writing skills and dialogue rules.

Part title



- Parents' Tips: Activity (2): Assist your child to use his/her writing skills and follow the steps of the writing process to write the fourth part of the story "Ramy is Sick".
- Aim: Write and illustrate the final part of a story.



Lined writing area with 20 horizontal lines for text entry.



○ **Subject integration:**

- **English:** • Write narratives to express real or imagined experiences or events, using descriptive details and clear event sequences.
- Organize an event sequence that unfolds naturally, using temporal words and phrases to signal event order.

○ **Life skills:** Accountability - Communication.



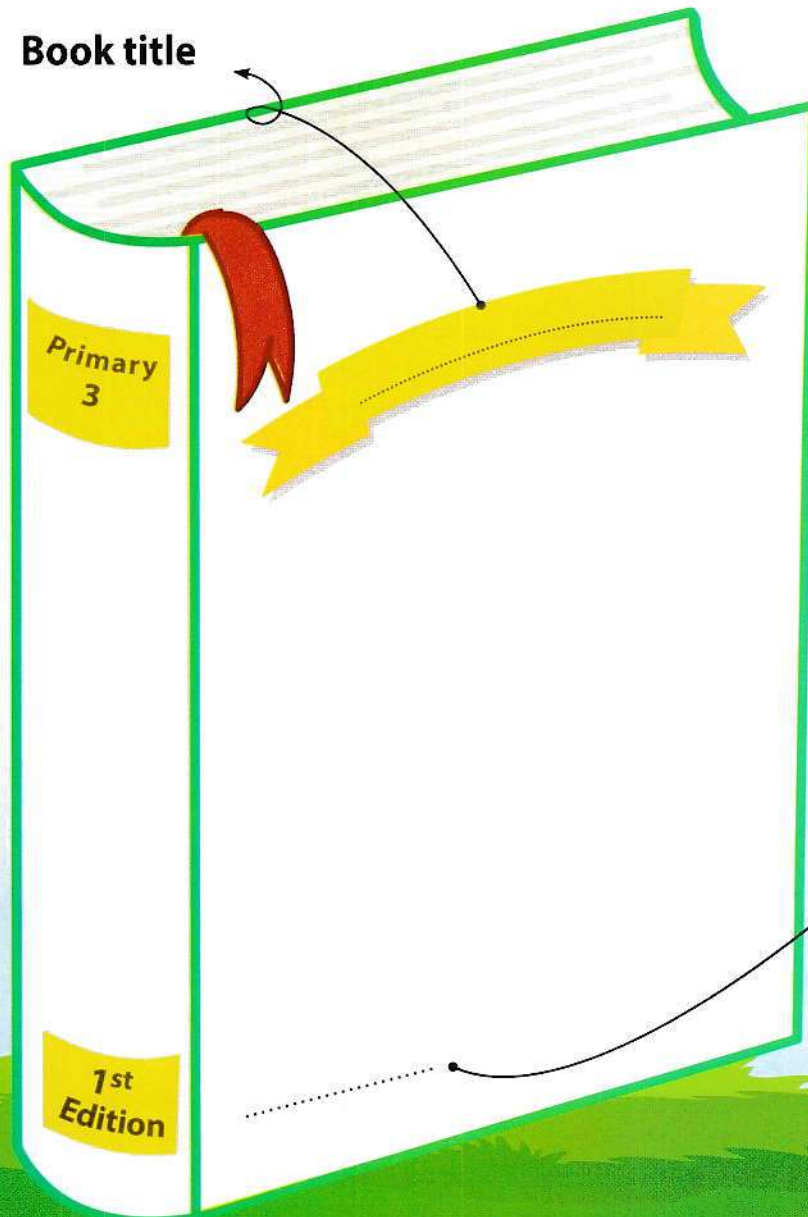
Lesson  
**10**

# Project

Design a Book Cover

**Design a cover for the book that gathers the four story parts, then share your book with your friends.**

**Book title**



**Author's name**



**Tick (✓) the learning outcomes you have learned through the chapter:**

- ☐ Differentiate between the facts, fictions and opinions.
- ☐ Illustrate the contributions of ancient Egyptians in different fields such as medicine.
- ☐ Conduct an experiment and write observation and conclusion.
- ☐ Know the contributions of modern-day Egyptian doctors in the field of medicine that were influenced by ancient Egyptians.
- ☐ Identify the primary and secondary sources and analyze them.
- ☐ Compare between the past and present hospitals.
- ☐ Identify the past and present medical tools.
- ☐ Create different timelines depending on much information.
- ☐ Write a fictional story using the writing process and skills.

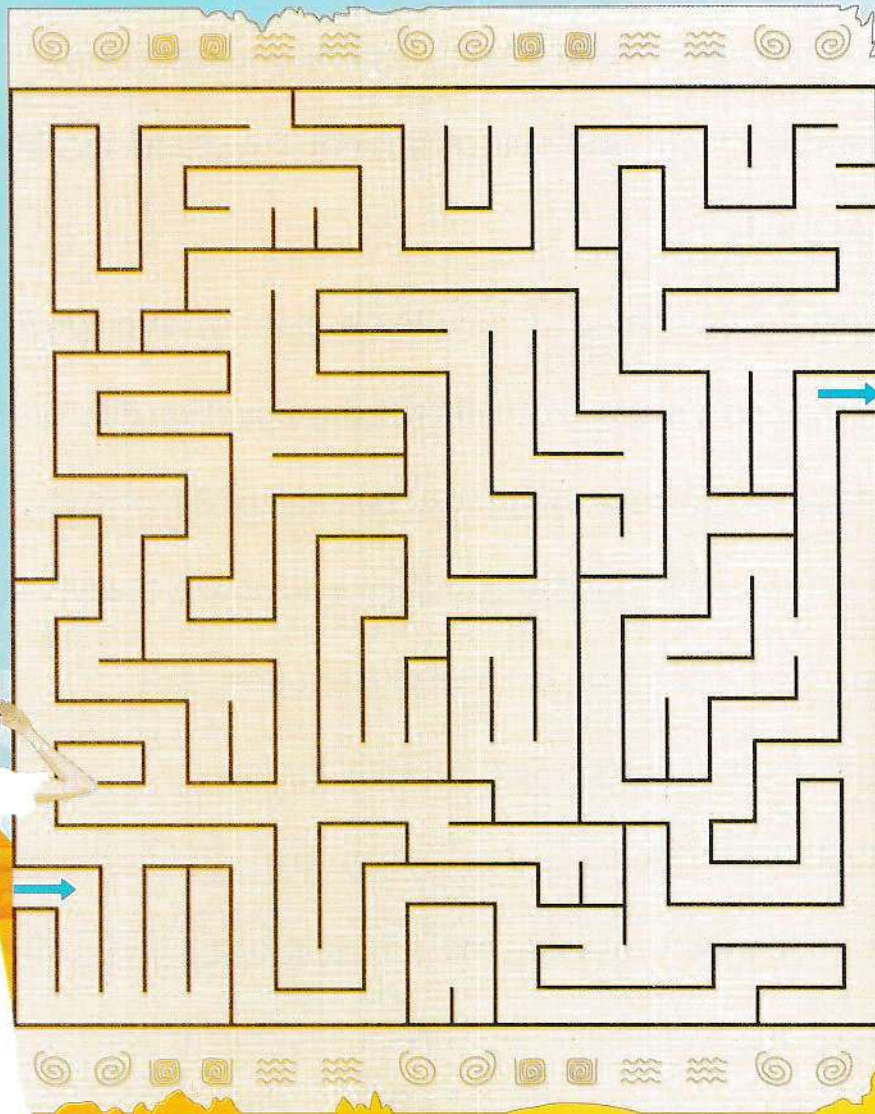




# Al-Adwaa★ oasis

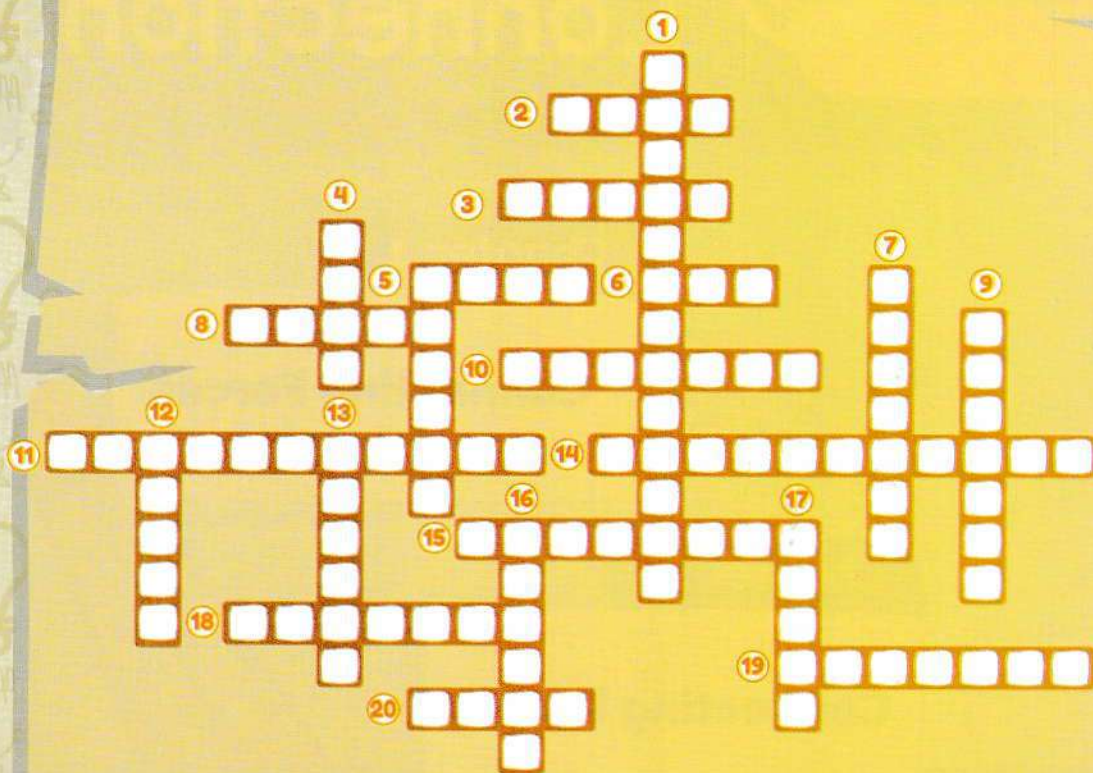


Help the Egyptian princess find her cat in the desert:





# ANCIENT EGYPT



## Down:

1. Hieroglyphics
4. Tomb
5. Symbol
7. Pyramid
9. History
12. Edwin
13. Sphinx
16. Temple
17. Egypt

## Across:

2. Isis
3. Ebers
5. Saws
6. God
8. Mummy
10. Papyrus
11. Stethoscope
14. Thermometer
15. Otoscope
18. Kingdom
19. Pharaoh
20. Nile





**THEME**

**4**

# Communication Connections

## Chapter 1

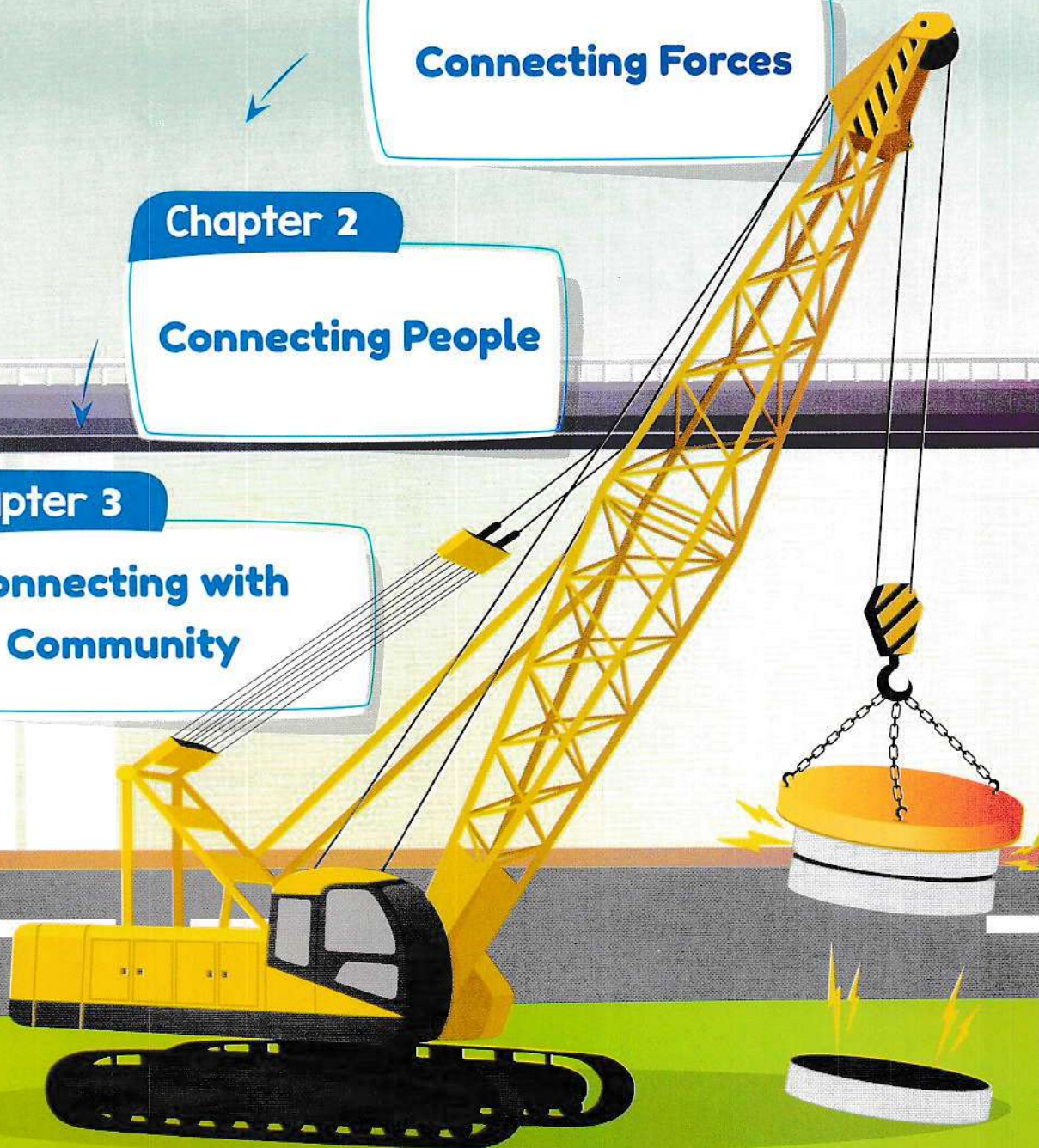
### Connecting Forces

## Chapter 2

### Connecting People

## Chapter 3

### Connecting with Community











## CHAPTER 1

# “Connecting Forces”



## Chapter Overview



### Discover:

- Students explore the concepts of force and motion and discover the connections between them through active learning experiences.
- Students build upon communication skills to identify force and motion around them.



### Learn:

- Students learn how analyzing patterns in data can help to make predictions about motion.
- Students explore the effect magnets have on various materials, including other magnets.
- Students explore the existence of magnetic fields by using evidence.



### Share:

- Students use the engineering design process and growing knowledge of forces, motion, and magnets to create a tool for the field of agriculture.
- Students redesign the product using peer feedback to make changes.
- Students self-assess progress.



# Pacing Guide

Lesson

Instructional Focus

Key vocabulary

Discover



## Students will:

- 1 - Observe motion in the classroom.
- 1 - Identify forces that cause motion.
- 1 - Collaborate to draw conclusions.
- 2 - Observe how a contact force can start, stop, or change the direction of an object's motion.
- 2 - Skim text to identify unknown words.
- 2 - Use context to help define unknown words.

- Force.
- Motion.
- Pull.
- Push.

- Skim.

Learn



## Students will:

- 3 - Analyze data to identify patterns.
- 3 - Use patterns in data to predict future motion of an object.
- 4 - Describe the effect magnets have on a variety of materials.
- 4 - Record observed properties of various materials.
- 5 - Describe the effects of magnets on each other.
- 5 - Identify the north and south poles of a magnet.
- 6 - Collaborate with peers to complete hands-on investigations.
- 6 - Use observed evidence to describe a magnetic field.
- 6 - Use academic words to communicate observations.
- 7 - Deconstruct an object with multiple parts to examine how the parts work together.
- 7 - Collaborate to reconstruct the parts into a new object.

- Pendulum.
- Predict.

- Attract.
- Magnet.
- Rebel.

- Compass.
- Pole.

- Magnetic field.

- Reverse engineering.

Share



## Students will:

- 8 - Explain why the cost of a product might be important to a farmer.
- 8 - Design and create simple products for a farm.
- 8 - Review and use the engineering design process.
- 9 - Use self-management skills to complete a task.
- 9 - Collaborate to build a model of a product.
- 9 - Give effective feedback to improve a peer's model.
- 10 - Use feedback to redesign a product.
- 10 - Determine design costs for the farmer.
- 10 - Self-assess progress in learning.

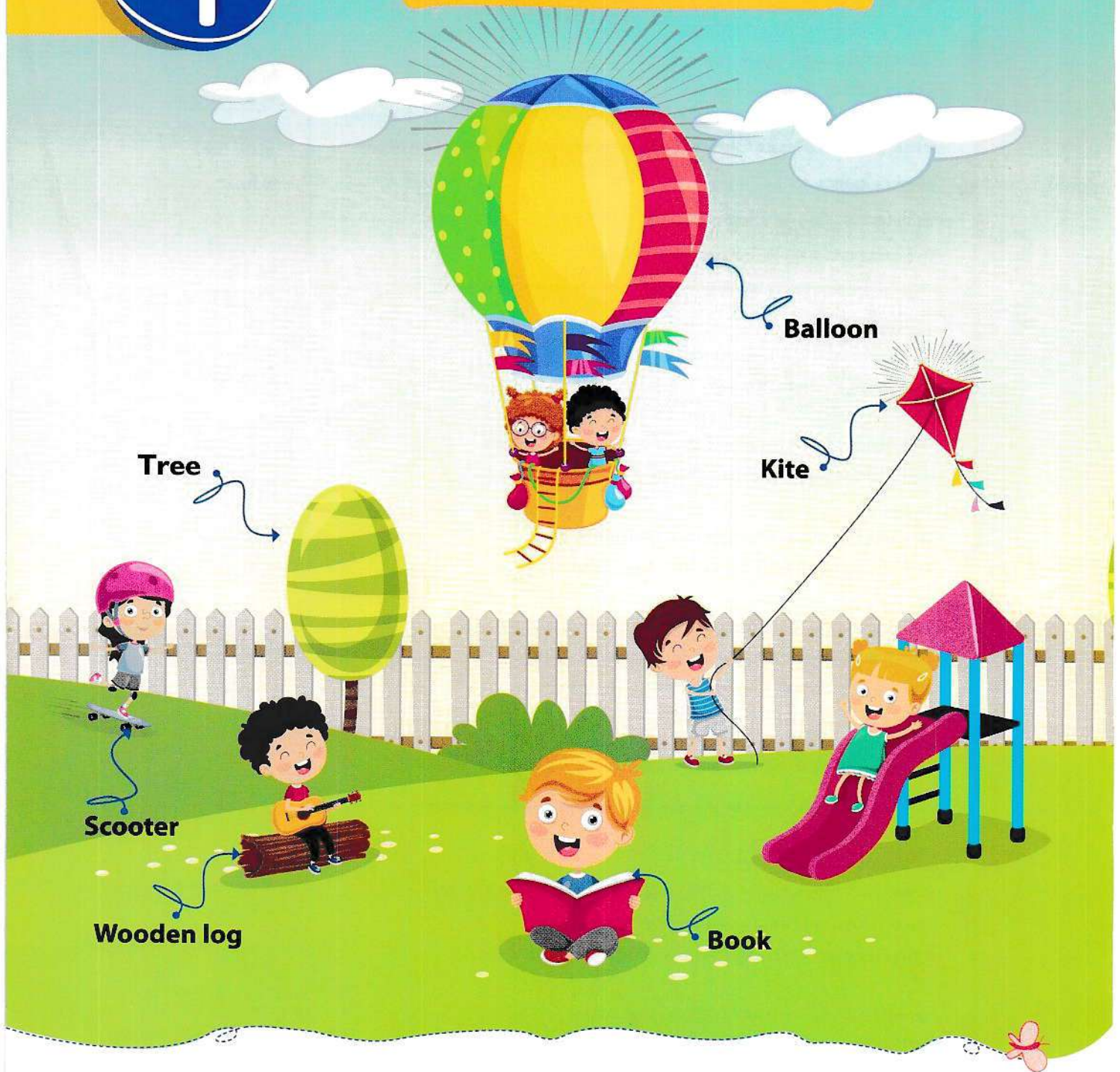
- Engineering design process.

- Engineering design.

- Improve.



# What is Motion?



○ **Parents' Tips: Activity (1):** Help your child understand the meaning of motion by classifying the objects in the picture into immovable or movable, then let him/her think what causes this motion.

○ **Aim:** Observe the motion of the objects around us.



**Activity 1**

Classify the objects in the previous picture into "Movable & Immovable":

Movable objects	Immovable objects
Balloon	Tree

**Motion** is all around us, it is the movement of objects from one place to another.



Ball



Bike

**Subjects integration:**

- **English:** Answer the question to demonstrate understanding of the text.
  - **Science:** Identify the meaning of motion.
- **Life Skills:** Critical thinking - Collaboration.



# Force and Motion

## Activity 2 Read, then answer:

**1** Sally, do you know the reason of motion?

**2** Of course, let me give you an example this ball will not move until you kick it.

**3** So, do you mean that without pushing it, it will not move?

**4** Exactly! we must **apply force** on an object to make it move.

**5** Force?!

**6** Yes, because force is the action of the **push** or **pull** applied on an object causing its motion.

### Complete:

\* Force is the action of ..... or ..... applied on an object to let it move.

- Parents' Tips: Activity (2): Assist your child to read the conversation to understand the reason of the motion of an object, then let him/her answer the following question.
- Aim: Identify the meaning of force.
- Subjects integration:
  - English: Answer the questions to demonstrate understanding of the text.
  - Science: Identify the meaning of force.
- Life Skills: Collaboration - Verbal communication.





## Pull or Push

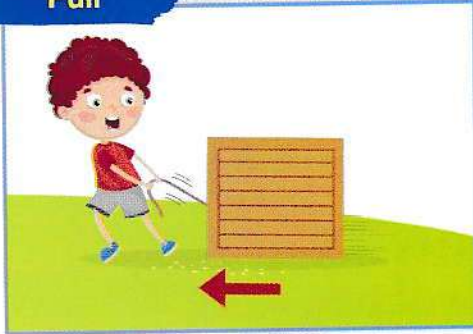
### Activity 3

Learn the difference between push and pull, then answer:

#### Note:

Pull and push are two opposite actions that describe the force.

#### Pull



Using a force to move an object **towards** you.

#### Push



Using a force to move an object **away from** you.

#### Tick (✓):

1 To move a car away from you, you must ..... it.

☐ pull

☐ push



2 To move a chair towards you, you must ..... it.

☐ pull

☐ push



3 Push and pull forces are ..... forces.

☐ same

☐ opposite



○ **Parents' Tips:** Activity (3): Help your child understand the difference between Push and Pull forces, then let him/her answer the following question.

○ **Aim:** Identify the force that causes the motion.

○ **Subjects integration:**

- **English:** Answer the questions to demonstrate understanding of the text.

- **Science:** Identify the types of force.

○ **Life Skills:** Critical thinking - Verbal communication.



# Activity 4 Draw a circle to classify the applied force in each picture:



Pull | Push



Pull | Push



Pull | Push



Pull | Push



Pull | Push



Pull | Push

- **Parents' Tips: Activity (4):** Help your child identify the applied force in each picture.
- **Aim:** Identify the forces that cause the motion.
- **Subjects integration:**
  - **English:** Answer the questions to demonstrate understanding of the text.
  - **Science:** Identify the types of force.
- **Life Skills:** Critical thinking.



# Lesson 2

## Journaling My Observation

**Activity** Learn the effects of the force, then tick (✓):

### The effects of the force

#### 1 Move an object



Force can be used to **move** an object, like riding the bike.

#### 2 Stop an object



Force can be used to **stop** an object, like a boy who stops a moving ball.

#### 3 Change an object's direction



Force can be used to **change the direction** of an object, like kicking a ball.

Examples	Move	Stop	Change the direction
 <b>Pulling the car brakes</b>		✓	
 <b>Playing Volleyball</b>			
 <b>Skiing on the ice</b>			

- **Parents' Tips: Activity:** Discuss with your child the effect of the applied force to move, stop, or change the direction of an object's motion, then let him/her classify the given examples.
- **Aim:** Identify the effects of the force.
- **Subjects integration:**
  - English: Answer the questions to demonstrate understanding of the text.
  - Science: Describe the effects of the force on the motion of an object.
- **Life Skills:** Critical thinking - Verbal communication.



## Motion on the Farm

## Activity 1 Read and learn, then answer:

1  
Spending our day in the farm is a great idea... to know how farmers, work hard to grow and harvest crops.

2  
I'm excited!!  
Let's take a tour and see.

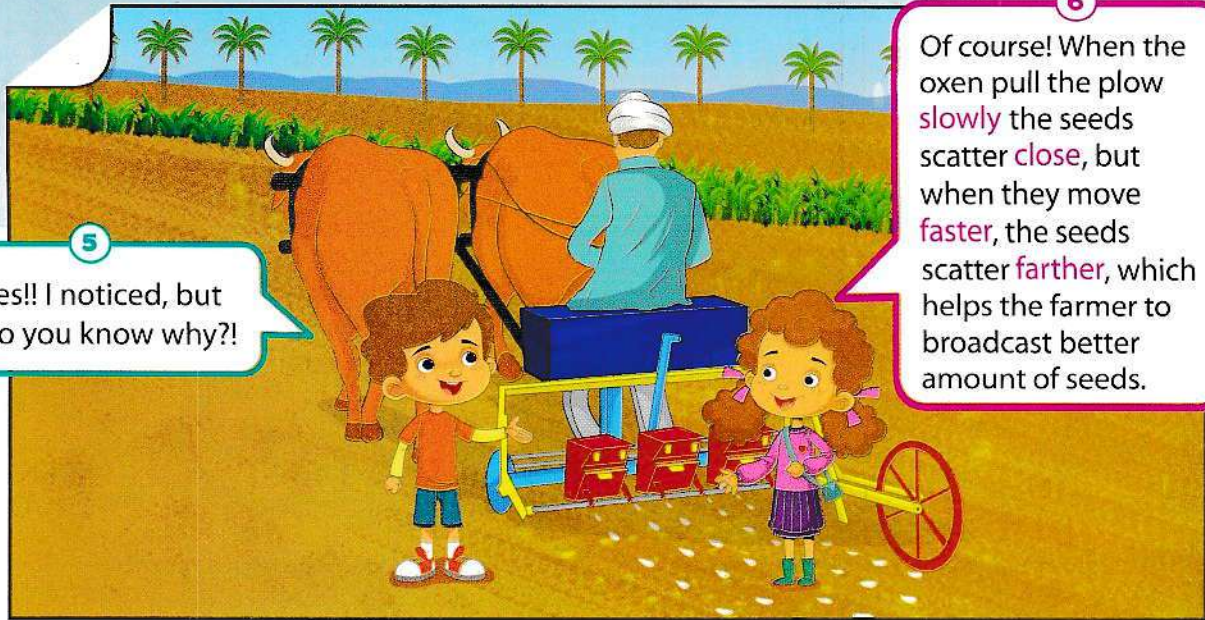
3  
Sally, look the oxen are pulling the **plow** to scatter (distribute) the seeds in the soil.

4  
Yes!! But did you notice that the farmer controls the oxen's speed?

**Note:**  
**Plow:** it is a farming tool used to broadcast (scatter) seeds.

- Parents' Tips: Activity (1): Assist your child to read the conversation and discuss it with him/her to understand that the more we apply force on something to push it, the further it moves, then let him/her answer the above question.
- Aim: Identify the effects of force.





5 Yes!! I noticed, but do you know why?!

6 Of course! When the oxen pull the plow **slowly** the seeds scatter **close**, but when they move **faster**, the seeds scatter **farther**, which helps the farmer to broadcast better amount of seeds.

### Complete:

- 1 Ramy, saw the giant oxen ..... the plow to scatter the seeds.
- 2 Sometimes the seeds distribute ..... to the plow, and sometimes .....
- 3 The seeds distribute close when the oxen move the plow .....
- 4 The farmers increase the speed of the oxen to ....., so they can plant more crops.

### Note:

If we use more force to push something, it will move further.



### Subjects integration:

- **English:** Answer the questions to demonstrate understanding of the text.
- **Science:** Describe the effects of the force on the motion of an object.
- **Life Skills:** Critical thinking - Verbal communication.

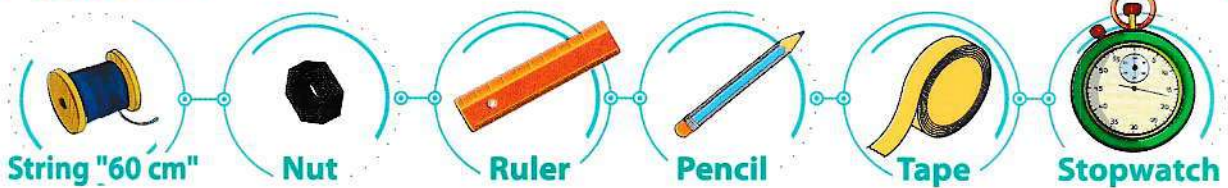


# Pendulum in Motion

## Experiment Time

Let us do an experiment to set up a pendulum, then answer:

### Tools



### Steps

1



Use the tape to fix the pencil at the edge of the desk "half the pencil hangs over the desk".

2



Tie one end of a 60 cm string to the hanged part of the pencil and fix a nut to the other end.

3



Pull the nut back with an angle  $90^\circ$  in a position parallel to the floor.

4



Leave the nut and count the number of periods in 15 seconds using the stopwatch, and record the results.

5



Then, shorten the length of the string to 30 cm, and repeat the previous steps, and record the results.

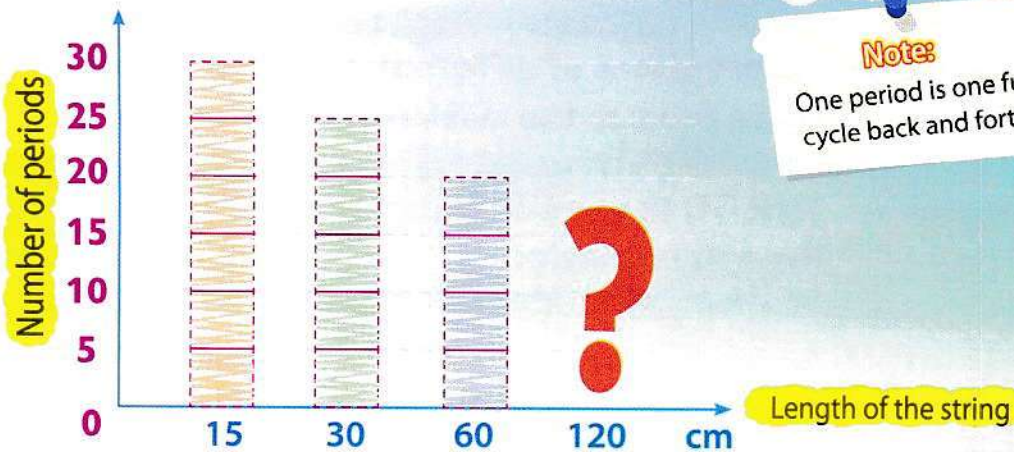
- **Parents' Tips:** Help your child read and follow the experiment steps to build a pendulum model using different string lengths (60 cm & 30 cm) and count the number of periods of each trail, then let him/her record their observations.

- **Aim:** Build a model of a pendulum.





## Observation



## Conclusion

"There is a relation between the length of the string and the number of periods counted. So, as we increase the length of the string the number of periods decreases and vice versa".

### Tick (✓):

- 1 Using a shorter string ..... the number of periods.  
☐ increases ☐ decreases
- 2 From, the given data pattern, can you predict how many periods will happen using a 120 cm string?  
☐ 15 ☐ 23



### Subjects integration:

- English: Ask and answer questions about experiments.
- Science: Perform an experiment and record observation.
- Life Skills: Critical thinking - Collaboration - Verbal communication.

## Predict the Motion

We use our observations of different objects pattern of motion to help us predict the motion of other objects."

### Activity 2

Tick (✓) the predicted motion of the moving objects in each scenario:

1



- In order for the juggler to restore his balance, he should .....

- ☐ move right
- ☐ stop moving

2



- If the boy left his pen from his hand, it would .....

- ☐ move upward
- ☐ move downward

3



- If the boy bounces (hits) the ball hard on the ground, it will .....

- ☐ move upward
- ☐ move downward

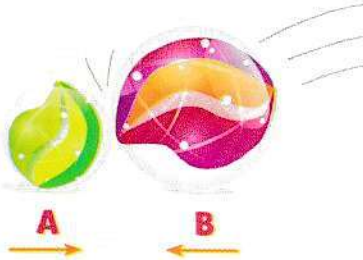
○ Parents' Tips: Activity (2): Help your child look at the pictures and predict the pattern of motion in each scenario.

○ Aim: Predict the future motion of an object.





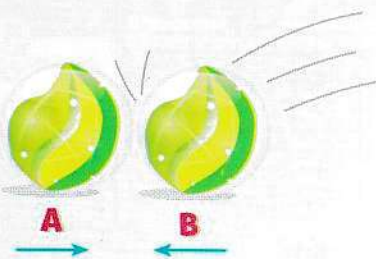
4



- If there was a collision between a large marble and a smaller one.
  - In which direction would the small marble move?

- ☐ To the right.
- ☐ To the left.

5



- If two equal-sized marbles collide, they will .....

- ☐ stop moving
- ☐ repel

6



- If a girl throws a stone in a water container, it will .....

- ☐ move downward
- ☐ move right



○ **Subjects integration:**

- **English:** Answer the questions to demonstrate understanding of the text.
- **Science:** Analyze patterns in an object's motion to predict future motion.

- **Life Skills:** Critical thinking - Communication.



# Lesson 4

## Testing the Effect of Magnets

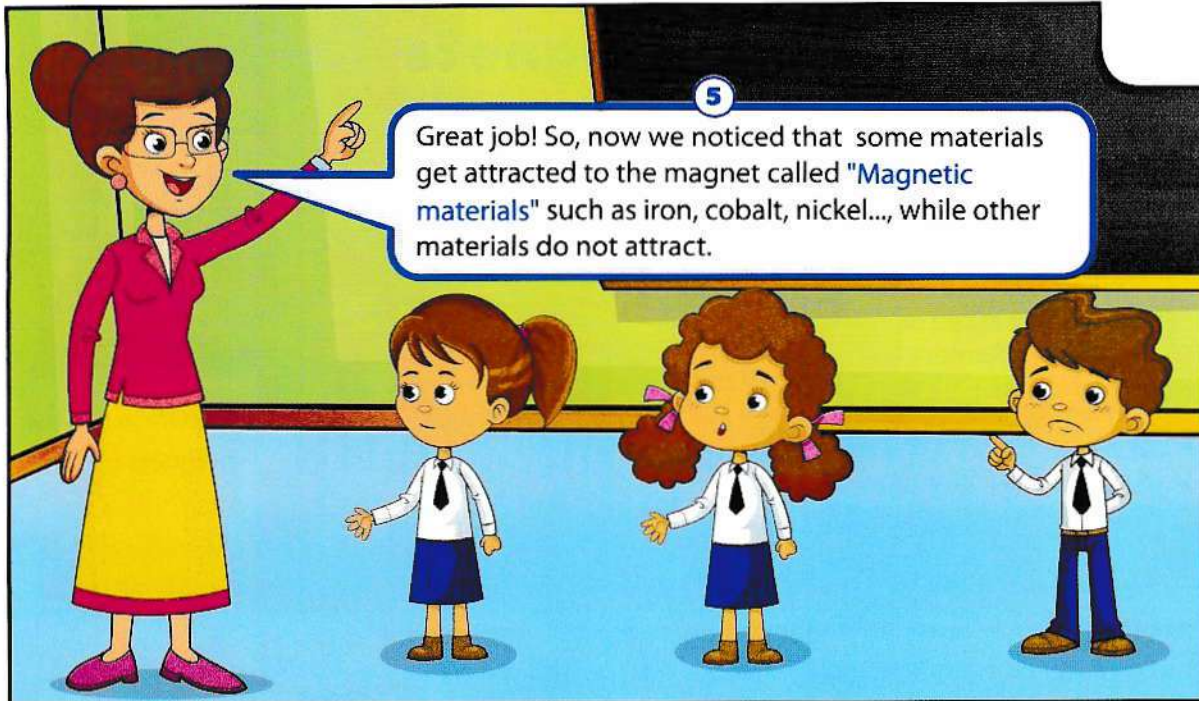
**Activity 1** Read, then classify the following materials using a magnet:



○ **Parents' Tips:** Activity (1): Help your child use a magnet to classify the given materials into "Magnetic materials" and "Non-magnetic materials", then let him/her search about how farmers can use magnet.

○ **Aim:** Describe the effect magnets have on a variety of materials.





**"Non-magnetic materials"**

Wood

Chalk

**"Magnetic materials"**

Paper clips



**Search how farmers can use the magnet in their jobs.**

**Note:**

Materials that do not attract to the magnet are called "**Non-magnetic materials**".

**Subjects integration:**

- English: Answer the questions to demonstrate understanding of the text.
- Science: Describe the effects of magnets on a variety of materials.
- Life Skills: Critical thinking - Collaboration - Reading.



## Cow Magnets

### Activity 2 Read, then answer:

Hey!! I need your help, my teacher asked us to search if farmers use magnets.

Of course, we use magnets to **save** cows' lives.

Interesting!! But, how?!

The cows in the farm eat grass, but accidentally they can swallow small pieces of metals hidden in the grass (ex: nails) and overtime these metals get trapped in cow's stomach.

Oh, that's too painful!! But how do magnets save their lives?

We fix an accessory like magnet to the cows' nose called "**Nose pliers**", so when they start eating it attracts the metals from the grass.

- Parents' Tips: Activity (2): Assist your child to read the following conversation and understand how farmers use magnet to help their cows from getting sick.
- Aim: Describe the effect that magnets have on a variety of materials.





**Complete using the given words:**

**iron - magnets - nose pliers - magnetic - metal -  
small - non-magnetic**

- 1** Cows eat grass, but they also swallow ..... pieces of .....
- 2** To keep the cows safe, farmers fix ..... to their noses.
- 3** Farmers use ..... to help prevent their cows from getting sick.
- 4** Magnets attract materials that contain .....
- 5** Materials attracted to magnet are called ..... materials, while  
materials that aren't attracted to magnet are called .....  
materials.



**Search to find other ways of using magnets to keep cows safe.**



**Subjects integration:**

- **English:** Answer the questions to demonstrate understanding of the text.
- **Science:** Describe the effects of magnets on a variety of materials.

- Life Skills:** Critical thinking - Verbal communication.



# How Do Magnets Differ from Other Materials?

## Activity 1

Read, then answer:

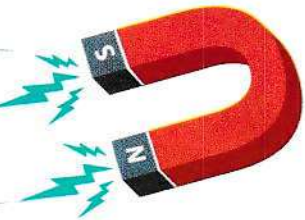


Hey!!

Do you know that, **magnets** are almost made up of **iron and other materials**, and that magnets have **two** poles called "**North**" and **South**" poles?

### The poles of magnet

Are the two opposite ends of the magnet where the effect of magnetism is observed to be the strongest.



Tick (✓):

- 1 All magnets have ..... poles.  
☐ three ☐ two
- 2 Magnets are almost made of .....  
☐ iron ☐ copper
- 3 The poles of a magnet are the two ends of the magnet where the effect of magnetism .....  
☐ appears ☐ disappears



Search about the history of the magnet.



- **Parents' Tips:** Activity (1): Help your child recognize that all magnets have two poles "north pole" and south pole where the effect of magnetic force appears, then let him/her answer the following questions.
- **Aim:** Identify the north and the south poles of a magnet.
- **Subjects integration:**
  - **English:** Answer the questions to demonstrate understanding of the text.
  - **Science:** Identify the north and the south pole of a magnet.
- **Life Skills:** Critical thinking.

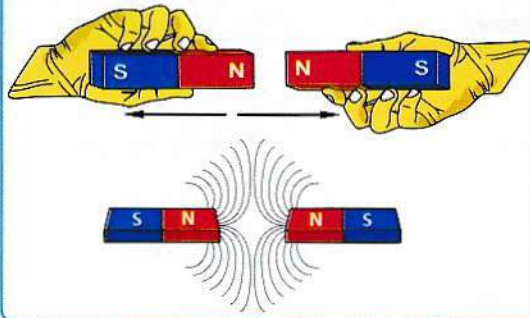




# When Magnets Come Together

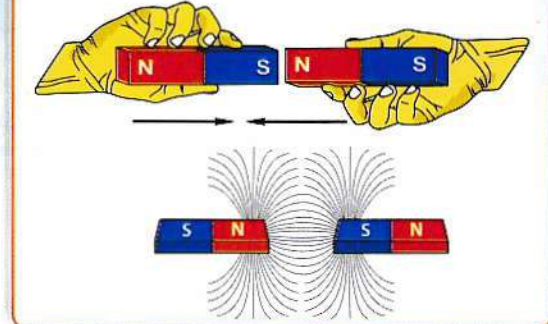
**Activity 2** Look at the pictures & understand, then answer:

## Like Poles



When we approach the north pole of a magnet to the north pole of another magnet, they will **repel**.

## Unlike Poles



When we approach the north pole of a magnet to the south pole of another magnet, they will get **attracted**.

**Tick (✓):**

**1** When like poles meet, magnets .....

☐ push away "repel" ☐ attract

**2** When unlike poles meet, magnets .....

☐ push away "repel" ☐ attract

**3** If we want to move the following magnet to the right direction without touching it. Which magnet will you choose? **N S** .....

☐ **S N** ☐ **N S**



- **Parents' Tips: Activity (2):** Help your child observe what happens when we approach like poles of two magnets together and unlike poles in another trial, then let him/her answer the above questions.
- **Aim:** Describe the effects of magnets on each other.
- **Subjects integration:**
  - **English:** Answer the questions to demonstrate understanding of the text.
  - **Science:** Identify the effects of magnets on each other.
- **Life Skills:** Critical thinking.



## Activity 3

Look at each pair of magnets, then write whether they "attract or repel":



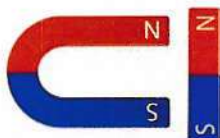


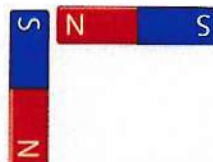


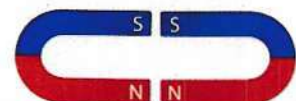






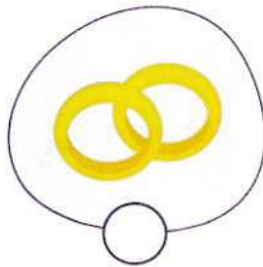
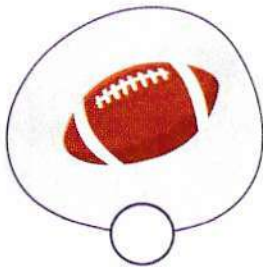
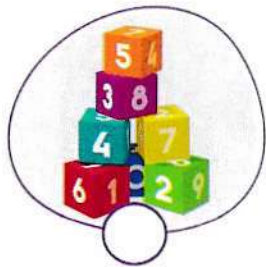
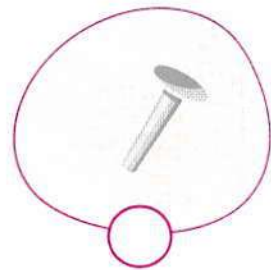
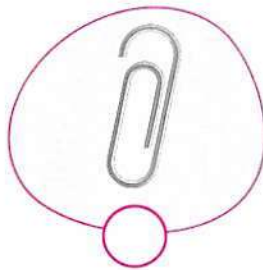
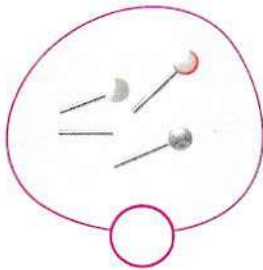
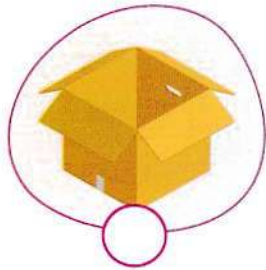







- **Parents' Tips:** Activity (3): Help your child look at each pair of magnets, think and predict whether they attract or repel each other.
- **Aim:** Describe the effects of magnets on each other.
- **Subjects integration:**
  - **English:** Answer the questions to demonstrate understanding of the text.
  - **Science:** Identify the effects of magnets on each other.
- **Life Skills:** Critical thinking.



**Activity 4** Tick (✓) the materials that will get attracted to the magnet:

- **Parents' Tips:** Activity (4): Help your child look at the given materials, think and predict the materials that will get attracted to the magnet.
- **Aim:** Describe the effects of magnets have on a variety of materials.
- **Subjects integration:**
  - **English:** Answer the questions to demonstrate understanding of the text.
  - **Science:** Determine the effects of magnets on a variety of materials.
- **Life Skills:** Critical thinking - Collaboration.



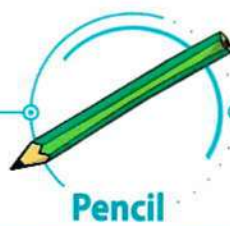
# Lesson 6

## Where Is the Magnetic Field?

### Experiment Time

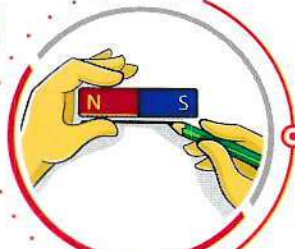
Let us do an experiment to explore the magnetic field lines of a magnet:

### Tools



### Steps

1



Put the bar magnet on the paper (centered) and use the pencil to start tracing the magnet's outline.

2



Place the compass at one of the magnet's poles and use the pencil to draw a dot where the compass needle points.

3



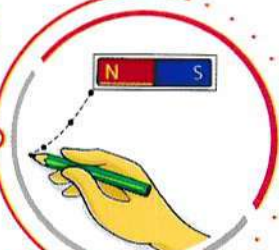
Move the compass, then draw a new dot where the compass arrow points.

4



Repeat the previous steps until you reach the end of the paper.

5



Connect the dots you have drawn, "this is the magnetic field line".

6



At a different point on the magnet repeat the previous steps to draw another line.

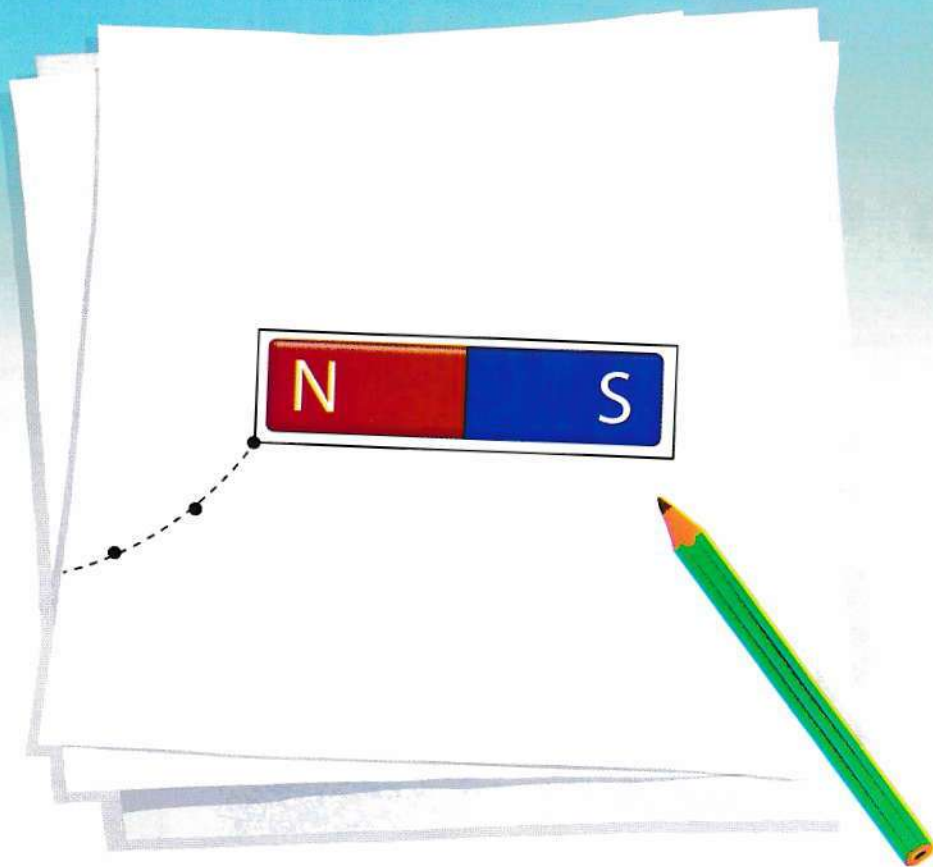
○ **Parents' Tips:** Help your child read and follow the experiment steps to explore and draw the magnetic field lines of a magnet, then let him/her record their observations.

○ **Aim:** Draw the magnetic field lines of a magnet.





**Using your pencil and magnet, draw the magnetic field lines:**



### Observation

The magnetic field around the magnet has a regular shape.

### Conclusion

The magnetic force is concentrated at the two poles of the magnet.



#### Subjects integration:

- English: Ask and answer questions about experiments.
  - Science: Perform an experiment and record observation.
- Life Skills: Critical thinking - Collaboration - Reading.



# Magnetism VS Magnetic field



We previously learned that the poles are the two opposite ends of magnet where the effect of magnetism is the strongest.

**Activity 1** Read and understand the following terms, then answer:

## Magnetism

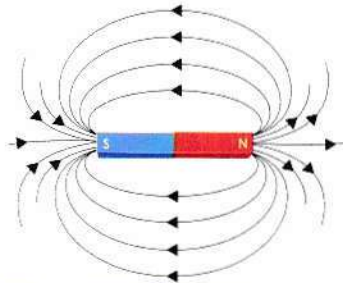
- Is an **invisible force** produced by magnet. This force allows the magnet to attract (pull) magnetic materials toward itself.



VS

## Magnetic field

- Is an **invisible area** around the magnet where the magnetic force effect exists.



## Complete:

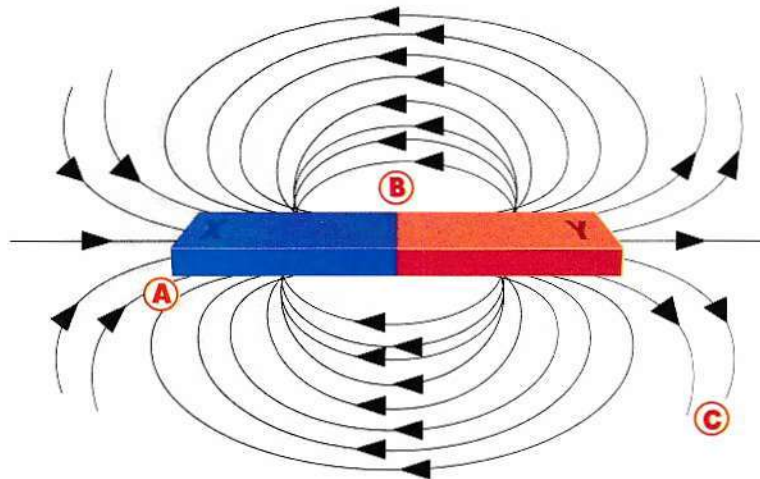
- 1 Magnetism is an ..... force.
- 2 Magnetism is the force that allows magnet to ..... magnetic materials.
- 3 We can't see the magnetic field, but we can observe its .....

- Parents' Tips: Activity (1): Help your child read & understand the different terms "magnetism" and "magnetic field", then let him/her answer the following questions.
- Aim: Describe the magnetism and the magnetic field.
- Subjects integration:
  - English: Answer the questions to demonstrate understanding of the text.
  - Science: Compare between the magnetism and the magnetic field.
- Life Skills: Critical thinking.



**Activity 2** Read and look at the picture, then answer:

**"The best way to detect the magnetic field is by spreading a little amount of iron filings around a magnet".**



**Tick (✓):**

**1** At any point is the force of the magnet the strongest?

☐ A

☐ B

☐ C

**2** The symbol X indicates the .....

☐ north pole

☐ south pole

**3** The symbol Y indicates the .....

☐ north pole

☐ south pole

**3** At any position does the force of the magnet disappear?

☐ C

☐ B





- **Parents' Tips:** Activity (2): Assist your child to explore the best way to detect the invisible magnetic field of a magnet by spreading iron filings around it, then let him/her answer the following questions.
- **Aim:** Use observed evidence to describe a magnetic field.
- **Subjects integration:**
  - **English:** Answer the questions to demonstrate understanding of the text.
  - **Science:** Describe the magnetism and the magnetic field.
- **Life Skills:** Critical thinking.



# Lesson 7

## Does It Have Parts?

**Activity 1** Look at the objects, and tick (✓) whether they have different parts or not.

Objects	Have different parts	Don't have different parts
Flower 	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Key 	<input type="checkbox"/>	<input type="checkbox"/>
House 	<input type="checkbox"/>	<input type="checkbox"/>
Bike 	<input type="checkbox"/>	<input type="checkbox"/>
Nail 	<input type="checkbox"/>	<input type="checkbox"/>
Tractor 	<input type="checkbox"/>	<input type="checkbox"/>



**Make a search about other objects that have many different parts.**

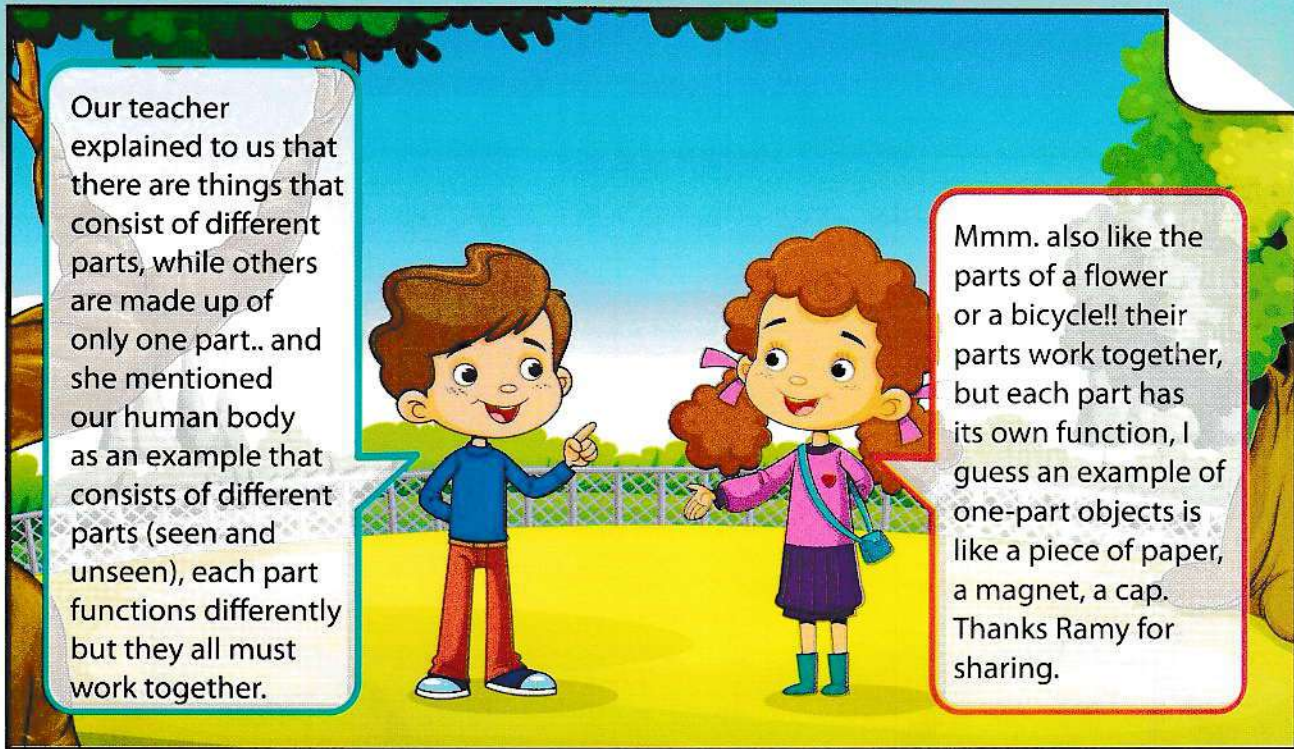


- **Parents' Tips: Activity (1):** Help your child classify the following objects to know whether they have different parts or not.
- **Aim:** Deconstruct an object with multiple parts to examine how the parts work together.
- **Subjects integration:**
  - **English:** Answer the questions to demonstrate understanding of the text.
  - **Science:** Observe that some objects are made of smaller parts that can be deconstructed and reconstructed into new objects.
- **Life Skills:** Critical thinking - Communication.



**Activity 2** Read, then answer:

**Sally was absent and missed today's lesson and Ramy wanted to share with her what he has learned.**

**Complete:**

- 1** There are things that consist of ..... , while others are made up of only .....
- 2** Each part of a bicycle has its own .....



- **Parents' Tips: Activity (2):** Help your child identify that there are objects that consist of different parts while each part has its own function and they all work together, then let him/her answer the following questions.
- **Aim:** Examine how an object parts work together.
- **Subjects integration:**
  - **English:** Answer the questions to demonstrate understanding of the text.
  - **Science:** Observe that some objects are made of smaller parts that can be deconstructed and reconstructed into new objects.
- **Life Skills:** Verbal communication.



# Lesson 8

## Engineering Design Process

### Activity

Using the "Engineering design process", design a model to help the farmers keep the cows in the barn at night:



- **Parents' Tips: Activity** : Help your child use the engineering design process, to design a model to help the farmer in his problem.
- **Aim**: Review and use the engineering design process to create simple products for a farm.
- **Subjects integration**:
  - **English**: Participate with peers to build a gate.
  - **Science**: Explain the importance of engineering design with support.
- **Life Skills**: Critical thinking - Communication.



# Lesson 9

## Our Tasks

### Activity 1 Complete your team work design tasks:



### My Teamwork

1 Who is responsible for searching about the types of gates used in farms and their parts?

Name: .....

2 Who is responsible for finding the necessary materials?

Name: .....

3 Who is responsible for planning and building the gate model?

Name: .....

4 Who is responsible for calculating the cost of the needed materials?

Name: .....

5 Who is responsible for testing the gate model?

Name: .....

- **Parents' Tips:** Activity (1): Help your child know the benefits of the cooperative work by letting him/her build a team to design a gate, then assign a task to each member.
- **Aim:** Collaborate to build a gate.
- **Subjects integration:**
  - **English:** Participate with peers to design a gate model.
  - **Science:** Apply the design process with modeling and support.
- **Life Skills:** Collaboration - Communication - Self-management.



## Testing Our Design

### Activity 2

Let your friend (classmate) review the gate model you have created with your team:

• **Reviewer's name:** .....

**I like your model because ...**

- ☐ the materials that were used are available.
- ☐ the design is attractive.
- ☐ planning steps are detailed.
- ☐ drawing are colored neatly.
- ☐ the total cost of the model is economic.



**One thing I would like to see is**

- **Parents' Tips:** Activity (2): Help your child review the gate model of his/her classmate.
- **Aim:** Support other students' learning through peer evaluation.
- **Subjects integration:**
  - **English:** Follow the "agreed-upon" rules of discussion.
  - **Social studies:** Explain why people must make economic choices.
- **Life Skills:** Respect for Diversity.

## Cost Sheet



- 



Lesson  
**10**

# Project

## My Redesign

Using "**Engineering design process**" build another model to help the farmer with his problem.

**1**

Idea

**2**

Materials

**3**

Plan

**4**

Build

**5**

Test

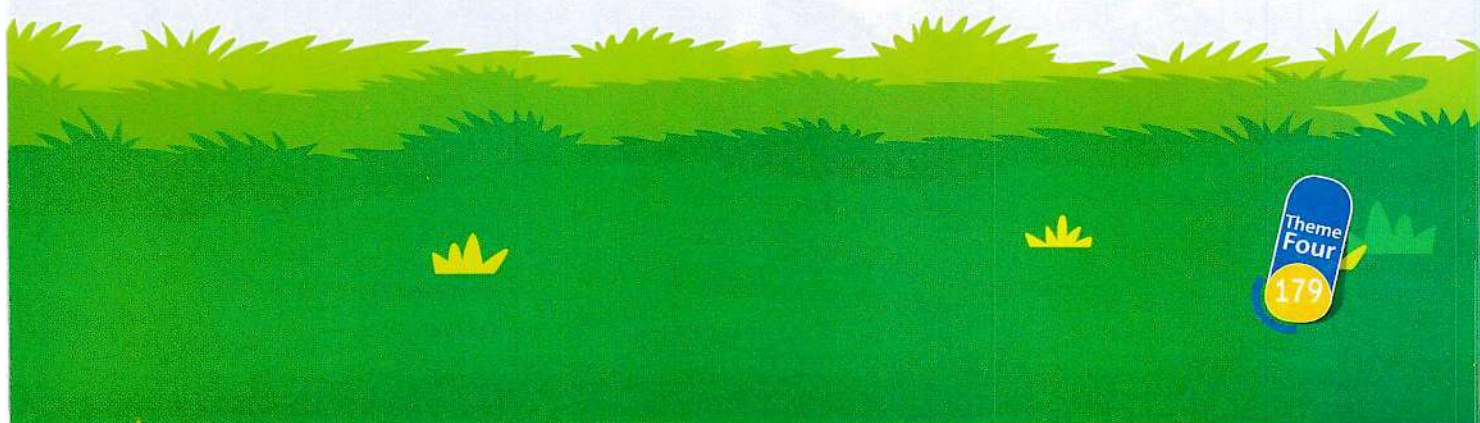
**6** Improve


**7** Cost sheet




**Tick (✓) the learning outcomes you have learned through the chapter:**

- ☐ Identify forces that cause motion.
- ☐ Explore how force can start, stop or change the direction of an object's motion.
- ☐ Analyze data to identify pattern.
- ☐ Use patterns in data to predict future motion of an object.
- ☐ Describe the effect magnets have on a variety of materials.
- ☐ Identify the north and south poles of a magnet.
- ☐ Describe the magnetic field.







Al-Adwaa

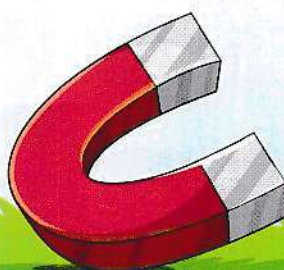
oasis



Help Sally find the words in the box:

- Attract
- Force
- Iron
- Magnet
- Magnetic field
- North pole
- Repel
- South pole

M	I	M	U	U	Q	L	F	O	R	C	E	F	I	S
G	I	A	O	W	I	D	E	K	U	D	P	Y	C	H
R	R	G	L	X	L	N	O	R	T	H	P	O	L	E
K	O	N	S	O	U	T	H	P	O	L	E	W	U	M
P	N	E	B	E	S	P	T	K	M	J	K	L	B	Z
A	T	T	R	A	C	T	P	R	K	Q	Y	M	I	X
L	H	I	R	H	K	M	F	T	I	C	I	J	I	Y
X	L	C	E	K	G	I	N	L	F	Q	A	X	Z	X
E	S	F	P	Y	W	X	C	Y	O	G	V	Z	W	V
B	S	I	E	T	X	I	M	X	R	E	P	E	L	M
K	A	E	L	T	W	F	B	K	C	I	V	U	N	Z
N	T	L	X	J	R	U	T	Y	E	H	E	B	V	E
U	S	D	J	M	E	S	S	Y	K	E	T	S	M	N
M	A	G	N	E	T	L	Q	P	N	F	H	V	B	X
V	R	J	J	B	I	K	T	Z	C	V	M	N	T	Q





## Magnetic or Non-Magnetic?



Magnets only attract certain materials. Draw a line to connect the magnet to the object(s) it will attract:







## CHAPTER

## 2

# “Connecting People”



## Chapter Overview



### Discover:

- Students discuss how people connect with each other in the local community.
- Students brainstorm challenges people face in staying connected and consider how technology may help solve those challenges.





### Learn:

- Students explore the reasons people use transportation and how it keeps people connected.
- Students learn about new inventions and innovations in transportation and the factors that influence a community's choice of a transportation system.
- Students learn the components of a computer and debate the advantages and disadvantages of technology use.



### Share:

- Students collaborate to design a form of technology for the future that will help people stay connected.
  - Students work independently to write and illustrate a story about Ramy and Sally in year 2040 using group designs.
- 
- 



# Pacing Guide

Lesson

Instructional Focus

Key vocabulary

Discover

1

## Students will:

- Identify connections between people in a community.
- Identify ways and reasons people connect.
- Brainstorm challenges people face in staying connected.

- Community.
- Connections.

2

- Explore how technology has changed over time.
- Identify problems that specific technologies solve.
- Brainstorm new ways people may connect in the future.

- Technology.



3

- Identify reasons people need transportation.
- Explain why people trade and how transportation makes trading easier.

- Barter.
- Trade.

4

## Students will:

- Describe components of a transportation system.
- Identify factors engineers consider when designing a transportation system.

- System.

Learn

5

- Identify advantages and disadvantages of new transportation technology.
- Use magnets to model how a Maglev train works.
- Imagine new technology to include in a "smart" city.

- Hyperloop train.
- Innovation.
- Maglev train.



6

- Skim a reading passage for details.
- Determine components of a computer and their functions.
- Analyze information and justify responses.

- Central processing unit (CPU).
- Input.
- Memory.
- Motherboard.
- Skim.
- Output.
- Storage.

7

- Identify a problem and possible solution in a story.
- Debate issues, listening and responding respectfully to others.
- Use evidence to support an argument.

- Advantage.
- Debate.
- Disadvantage.

Share

8

## Students will:

- Create a plan to work collaboratively.
- Design a solution to a problem.
- Acknowledge peers' contributions to group work.

- Design.
- Problem.
- Solution.

9

- Communicate ideas within a group to improve a design.
- Be creative in determining the setting for a futuristic story.
- Convey a message using art as the medium.

- Collaboration.
- Feedback.



10

- Acknowledge the importance of creativity in writing.
- Use writing process to create a futuristic story that relates to the design solution.
- Self-assess learning and management of goals.



Lesson  
**1**

# My Community







**Activity 1**

From the previous picture, write the names of the communities you will find & say why we connect with each one:

Community	Why we connect
School	To learn
Sports club	
Police station	

**We connect with people through our relationships  
or we might connect with others to exchange  
things (such as information).**



- **Parents' Tips:** Activity (1): Assist your child to look at the previous picture, then let him/her complete the given table to predict the people's connection reasons. (Look at the solved example).
- **Aims:** Identify why people connect.
- **Subject integration:**
  - **English:** Read and utilize the contents of pictures to predict the contents of a text.
  - **Economics and Applied sciences:** Family relationships and safety in the community.
- **Life skills:** Critical thinking - Writing - Non-verbal communication.

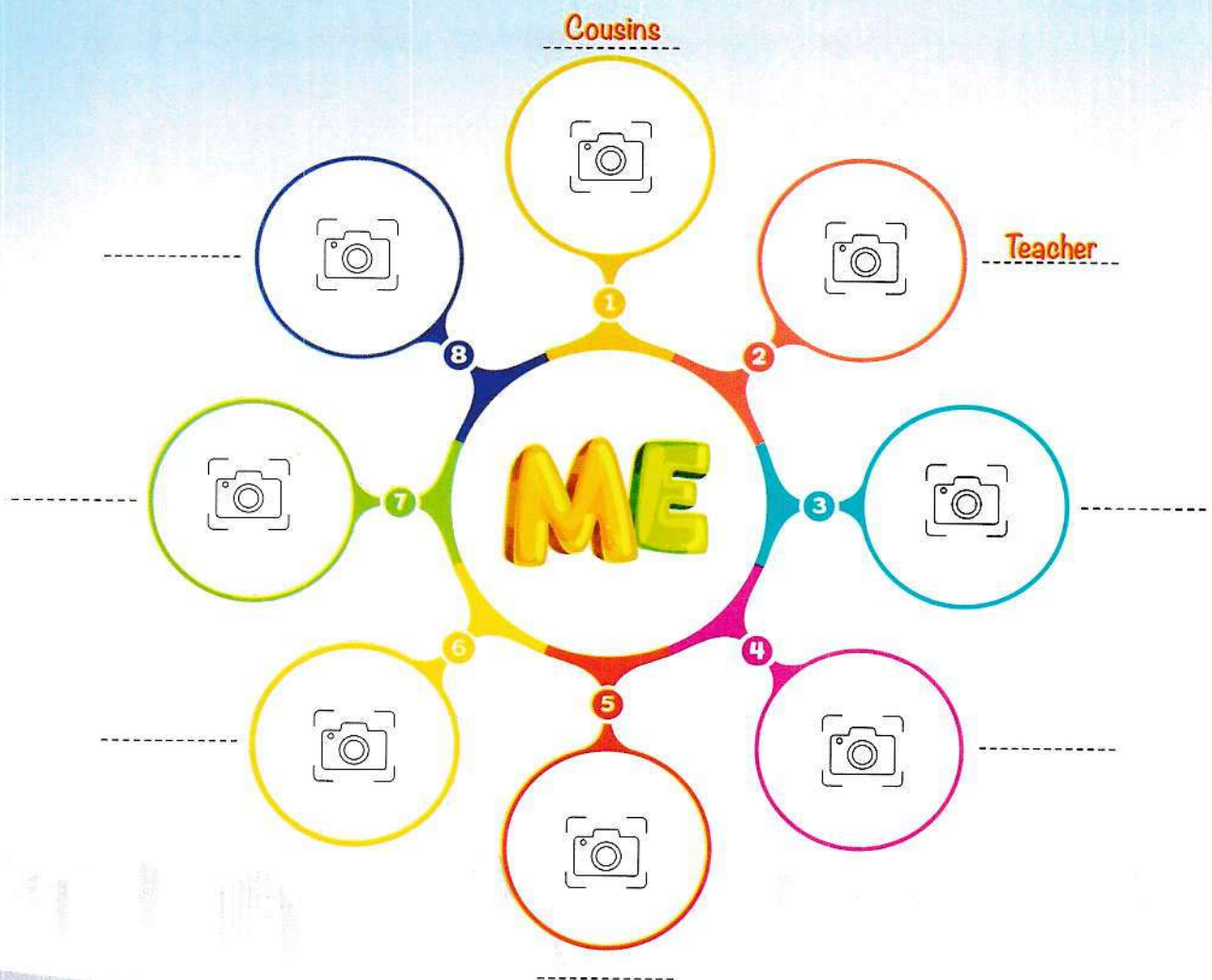




## Connecting People Web

### Activity 2

Stick pictures of the people you connect with in the shown "web", then write the name or relation of each:



- **Parents' Tips: Activity (2):** Help your child complete the people web (which is a group of people we connect in a certain community), then according to the web complete the table to predict reasons and ways people connect.
- **Aim:** Identify ways and reasons people connect.





From your “people web”, write how & why you connect with each:

	Who (name/ relation)	How we connect	Why we connect
1	Cousins	Call on phone or meeting together	Because we have fun together.
2	Teacher	Asking questions	
3			
4			
5			
6			
7			
8			

\* In your opinion, which is easier to communicate with?

- ☐ Family and friends we see every day.
- ☐ People living farther away.

○ **Subject integration:**

- English: Foundation skills (Write complete sentences).
- Economics and Applied sciences: Family relationships and safety in the community.

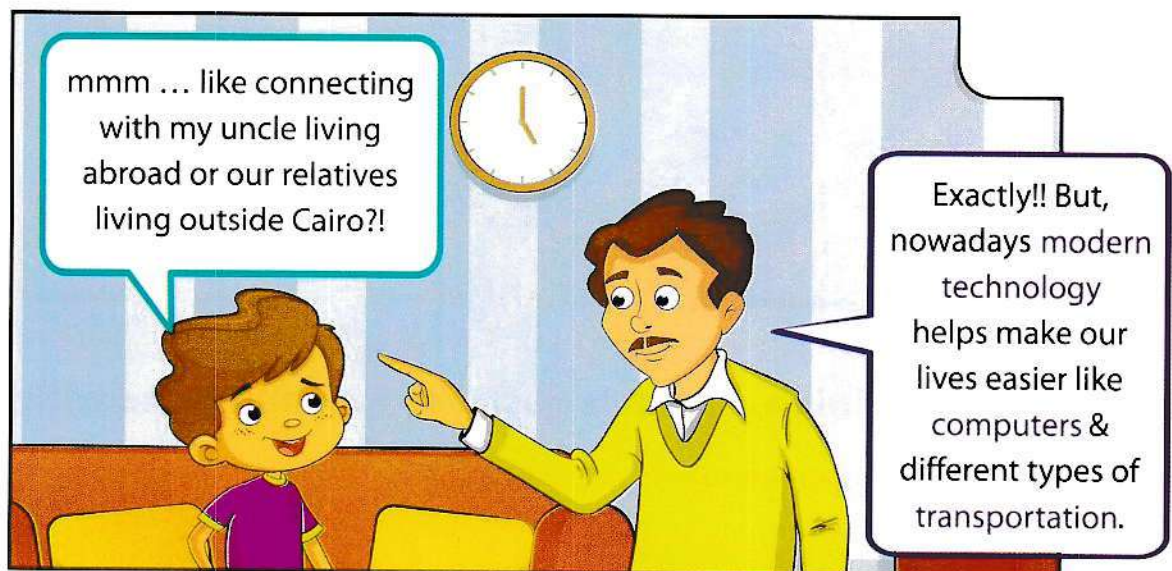
- **Life skills:** Critical thinking - Verbal communication - Self-management.





## Connection Challenges

### Activity 3 Read, then answer:



- **Parents' Tips: Activity (3):** Help your child read the discussion between Ramy and his father, then let him/her answer the given questions to differentiate between easy or challenging connections.
- **Aims:** Brainstorm challenges people face in staying connected.







Think how you can connect with people in the given cards, then tick (✓) if your connection is easy or challenging and write the reason:



**Your uncle living abroad is a/an .....**

- ☐ easy connection  
☒ challenging connection

**Why?** *Due to the long distance between us.*



**Your friend at school is a/an .....**

- ☐ easy connection  
☐ challenging connection

**Why?** .....



**Your cousins living in Alexandria is a/an .....**

- ☐ easy connection  
☐ challenging connection

**Why?** .....



**Your neighbors are a/an .....**

- ☐ easy connection  
☐ challenging connection

**Why?** .....



**Search more to know how modern technology helped connect people easier.**



- **Subject integration:**
  - English: Reading comprehension (Informational text).
- **Life skills:** Critical thinking - Verbal communication.



# Lesson 2

## Technology Through Time



**Technological inventions** are not always the new way to solve problems, but they can build on, or modify existing ideas or products.

### Activity 1

**Search to arrange the pictures (1– 4) in each set in the order of its invention (from the oldest to the newest):**

#### (A) Communication:



"Ball point pen"  
(.....)



"Mobiles"  
(digital messaging)  
(.....)



"Manual type  
writing machine"  
(.....)



"Quill pen"  
(.....)

#### (B) Transportation:



"Horse-drawn  
carriage"  
(.....)



"Motor wagon"  
(.....)



"Automobile"  
(.....)



"Electrical car"  
(.....)

**Each picture shows a piece of technology that was designed to solve a problem.**

- **Parents' Tips:** Activity (1): Help your child read the pictures content to arrange them according to the date of their invention.
- **Aim:** Explore how technology has changed over time.
- **Subject integration:**
  - **English:** Use visual representations and information contained in images to describe its basic ideas.
  - **Science:** Explain the role of society in the development and use of technology.
- **Life skills:** Critical thinking - Problem solving.





## Problems & Solutions

No invention is perfect and new problems may be identified. So, the technology keeps changing to meet the new needs of people who use it.



### Activity 2

From the previous activity, consider the given problems and write down the name of the invention which was invented to solve the problem:

#### Problem

#### Solution

Lack of transportation



Horse-drawn carriage was invented.

Gasoline is expensive & causes environmental pollution.



Lack of communication (non-verbal)



Messages take too much time to be received.



You can use your search skills to complete this activity.



- **Parents' Tips: Activity (2):** Help your child read and understand the above text, and let him/her think and write the inventions which solved the given problems (look at the solved example).
- **Aim:** Identify problems that specific technologies solve.
- **Subject integration:**
  - **Science:** Explain the role of society in the development and use of technology.
- **Life skills:** Critical thinking - Problem solving.





## Advantages & Disadvantages

“Every technological invention has its advantages as well as disadvantages.”

### Activity 3

Search to find an advantage & a disadvantage of each of the following inventions:



**Advantage:**

Independent from electrical & digital networks...

**Disadvantage:**

Lack of memory...

**Advantage:**

**Disadvantages:**



**Advantage:**

**Disadvantage:**

**Advantage:**

**Disadvantage:**



- **Parents' Tips:** Activity (3): Help your child read the text above, then answer the given questions to identify the advantages (good sides of the modern inventions) and disadvantages (bad sides of the modern inventions) of technology.
- **Aim:** Identify advantages and disadvantages of technology.
- **Subject integration:**
  - **English:** Write complete sentences using punctuation, prepositions, and coordinating conjunctions as appropriate.
- **Life skills:** Critical thinking - Verbal communication.





## Vocabulary

**Activity 4** Look, then tick (✓):

**Vocabulary word: "Technology"**



**1** Technology changes to meet people's needs.

☐ Yes

☐ No

**2** Technology has advantages only.

☐ Yes

☐ No

**3** There are different types of technology that serve different purposes.

☐ Yes

☐ No



### Definition

**Technology:** is a solution designed to solve a problem.



- **Parents' Tips: Activity (4):** Help your child define the word "Technology" by answering the given questions.
- **Aim:** Define, illustrate and use the new vocabulary in a sentence.
- **Subject integration:**
  - **English:** Define words and write complete sentences.
  - **Science:** Ask questions based on observations to find more information.
- **Life skills:** Critical thinking - Communication.



# Why People Need Transportation

## Activity 1 Read, then answer:

Tell me...  
What different  
forms of  
transportation  
do we use?

My dad traveled  
outside Egypt by  
airplane.

We travel to visit  
my grandparents  
by train.

My mom drives  
me to school every  
day by car.

My family  
and I went  
for a trip by  
bus.

Great answers!!  
Do you know that transportation does more than moving us  
around; it also moves our needs of wide variety of goods from  
where they are made to where they are sold in different areas.  
Transportation also connects people so; they can trade for  
the things they need.

- **Parents' Tips: Activity (1):** Assist your child to read the discussion between the teacher and students to understand why people need transportation.
- **Aim:** Identify reasons why people need transportation.



**Tick (✓) the reasons:**

**1** Young people (students) need transportation to .....

- |   |   |
|---|---|
| <input type="checkbox"/> be educated at schools   | <input type="checkbox"/> move goods             |
| <input type="checkbox"/> earn money at their jobs | <input type="checkbox"/> visit family & friends |

**2** Adults need transportation to .....

- |   |   |
|---|---|
| <input type="checkbox"/> be educated at schools   | <input type="checkbox"/> move goods             |
| <input type="checkbox"/> earn money at their jobs | <input type="checkbox"/> visit family & friends |

**3** People travel outside Egypt using a/an .....

- |                                   |                                |
|-----------------------------------|--------------------------------|
| <input type="checkbox"/> bike     | <input type="checkbox"/> taxi  |
| <input type="checkbox"/> airplane | <input type="checkbox"/> train |

**4** ..... move from where they are made to where they are sold in different areas.

- |                                  |                                  |
|----------------------------------|----------------------------------|
| <input type="checkbox"/> Goods   | <input type="checkbox"/> People  |
| <input type="checkbox"/> Schools | <input type="checkbox"/> Animals |

**5** People connect and can ..... for the things they need through transportation.

- |                                |   |
|--------------------------------|---|
| <input type="checkbox"/> trade | <input type="checkbox"/> travel                 |
| <input type="checkbox"/> study | <input type="checkbox"/> visit family & friends |

**○ Subject integration:**

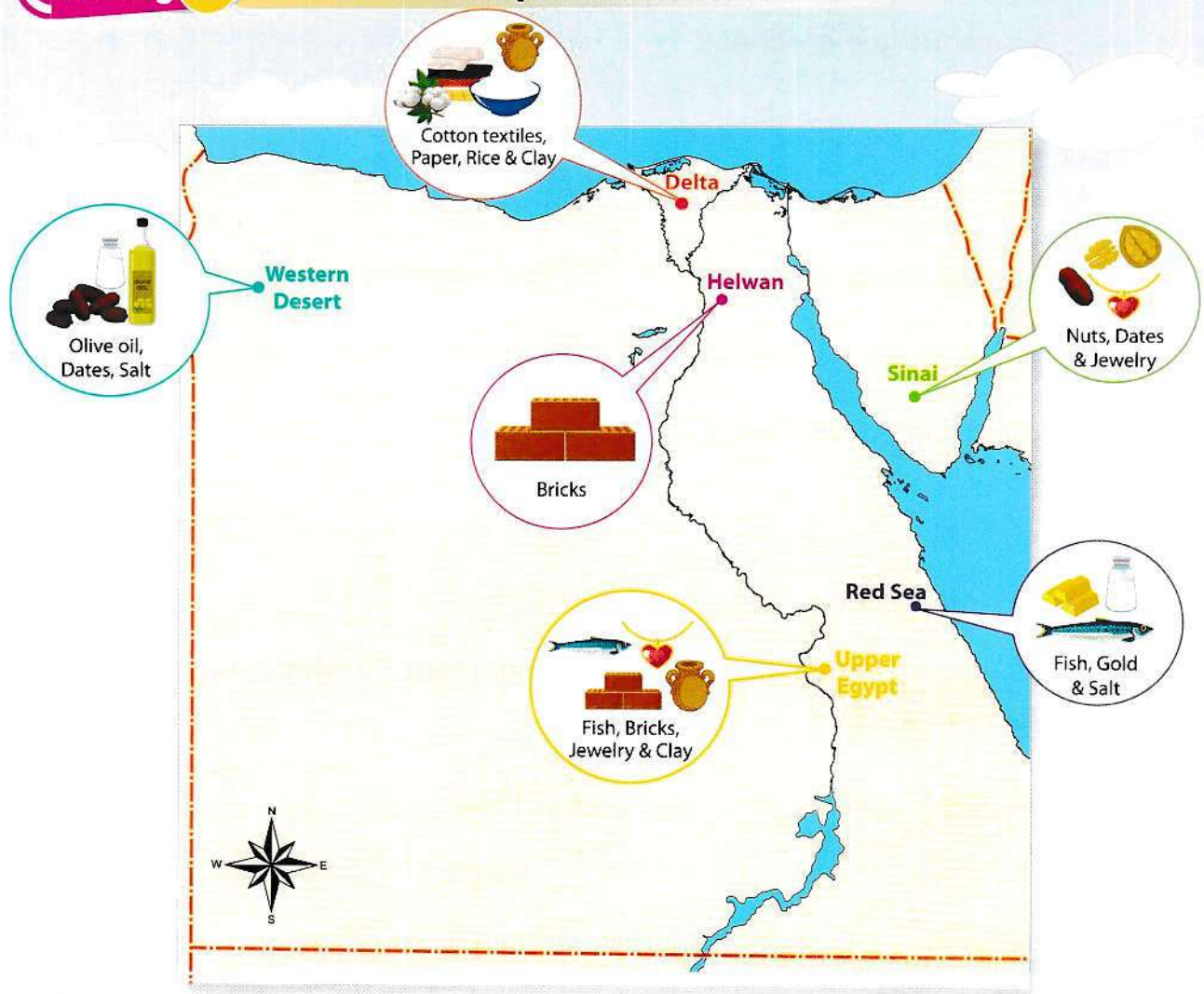
- **English:** Reading comprehension (Informational text).
- **Social studies:** Explain how transportation connects people, places and ideas.

**○ Life skills:** Critical thinking - Verbal communication.



# Trading Map

## Activity 2 Look at the map, then answer:



### Note:

- When you trade with someone you, will need to transport the goods. And the transportation cost will differ from one place to another according to the distance.

- **Parents' Tips: Activity (2):** Discuss with your child that different goods come from different places and how different means of transportation make trading easier, then let him/her answer the given questions.
- **Aim:** Explain why people trade and how transportation makes trading easier.



**Look at the trading map, then tick (✓):**

**1** If you need salt for cooking, you will trade with someone from .....

☐ Delta☐ Upper Egypt☐ Sinai☐ the Western Desert

**2** If you need cotton for textiles, you will trade with someone from .....

☐ Delta☐ Sinai☐ Helwan☐ the Red Sea

**3** If you need bricks (stones), you will trade with someone from .....

☐ Sinai☐ Helwan☐ Upper Egypt☐ Delta

**4** If you need olive oil & dates, you will trade with someone from .....

☐ Delta☐ Sinai☐ the Western Desert☐ the Red Sea

**\* Guess the means of transportation that can be used to trade the four previous products.**

**\* Trading can happen in 2 different ways:**

a) Trading money for a good, which is usually done nowadays.

b) Trading one good for another, known as "**Bartering**" this way existed since ancient days before the concept of money even existed.



**○ Subject integration:**

- **English:** Language (Vocabulary acquisition and use).

- **Social studies:** Explain how various forms of transportation can facilitate trade.

**○ Life skills:** Critical thinking.



# Lesson 4

## Getting to the Club

### Activity 1 Read, then answer:

Mom, could you please take me to the club?! My friends and I planned to play a football game together today.

Sorry, dear! Your dad just took the car to take your sister to her training. I wish you told us earlier to manage together.

mmm... Can't I go walking to the club?!

No dear, the club is 15 kilometers away from our home, it's too far and even if you walked, you'll arrive too late and tired to join the game. Let us manage another day together, so we can take you there.

### Tick (✓):

\* In your opinion, what other type of transportation can Ramy use to reach the club?

☐ Airplane

☐ Bus

☐ Train

☐ Bicycle

☐ Boat

☐ Rocket

- Parents' Tips: Activity (1): Help your child read the conversation and find out Ramy's problem, then answer the given question.
- Aim: Identify different types of transportation.
- Subject integration:
  - English: Reading comprehension (Informational text).
  - Social studies: Explain how transportation connects people and places.
- Life skills: Critical thinking - Verbal communication.





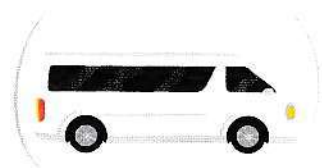
## Meeting People's Needs



Not every type of transportation works in all situations so, we must consider where we are going and how far the distance is. And if we have something to carry, to choose the suitable type of transportation that meet our needs.

### Activity 2

Look at the pictures & understand the use of each, then answer:



#### Automobiles

- Carry people quickly & efficiently within their regions/ communities.



#### Trains

- Carry people & heavy cargo for longer journeys (between cities).



#### Trucks

- Carry heavy cargo.



#### Bicycles

- Are useful for very short journeys in good weather.



#### Ships

- Are ideal to carry heavy cargo overseas.



#### Airplanes

- Are useful in traveling very long distances or over oceans quickly.

### Complete:

- 1 We use the ..... to go to school.
- 2 Traders move their goods overseas using .....
- 3 ..... are useful in very short journeys.
- 4 We travel from one country to another quickly using .....

○ **Parents' Tips:** Activity (2): Help your child read each card to understand uses of each means of transportation, then answer the given questions.

○ **Aim:** Identify uses and places of components of transportation system.

○ **Subject integration:**

- **English:** Reading comprehension (informational text).

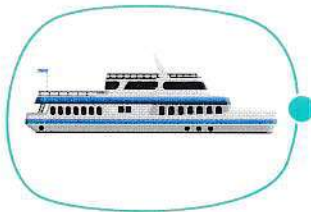
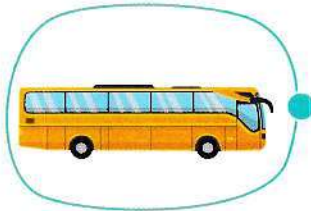
- **Social studies:** How transportation connects people, places and ideas.

○ **Life skills:** Critical thinking - Problem solving - Verbal communication.





### Activity 3 Match each type of transportation to where it moves:



Water



- **Parents' Tips:** Activity (3): Help your child identify where each type of transportation moves.
- **Aim:** Identify uses and places of components of transportation system.
- **Subject integration:**
  - **Social studies:** How transportation connects people, places and ideas.
- **Life skills:** Critical thinking - Problem solving - Decision making.







# Designing Transportation System

**Transportation system** is a collection of people and machines that work together to transport passengers and cargo.

## Activity 4 Read, then answer:

Engineers challenge to improve a lot of transportation systems by identifying the community needs, writing goals and thinking about several **factors**.

### A Where?

- Where is the means of transportation going to?
- How far will the people need to go?
- The system will be used on land, in water, or in air.
- Advantages & disadvantages.

### B Who?

- Who will use the transportation systems (people/ cargo/ both)?
- How many will use it and how often?



Transportation system involves **highways, rail roads, bus routes** and **subway lines**.



**Search more to learn about other factors that engineers might consider like cost and climate.**

- **Parents' Tips: Activity (4):** Discuss with your child the meaning and the importance of the transportation system and how engineers plan to design or improve transportation systems based on different factors.
- **Aims:** Identify factors engineers consider when designing a transportation system.
- **Subject integration:**
  - **English:** Reading comprehension (informational text).
  - **Science:** Explain the role of society in the development and use of technology.
- **Life skills:** Problem solving - Critical thinking - Decision making - Verbal communication.





## Transportation System Diagram

### Activity 5

Look & learn the given "Transportation System Diagram", then answer:

**Need** → Transport Egyptians abroad & tourists to Egypt (overseas).

**Transportation system "Airplane"**



#### Feedback

- People traveling.
- Number of flights.
- Accidents.



#### Location

- Airplanes will use **air**.
- Airport location.
- Advantages & disadvantages.



#### Users

- Hundreds of adults & children.
- Baggage. • Pets.



#### Results

- Flights.
- People traveling around the world.



#### Resources

- Pilots & attendants.
- Airplanes. • Airport.
- Technological support system.

★ Is there a similarity between this diagram & the engineering design process?

☐ Yes

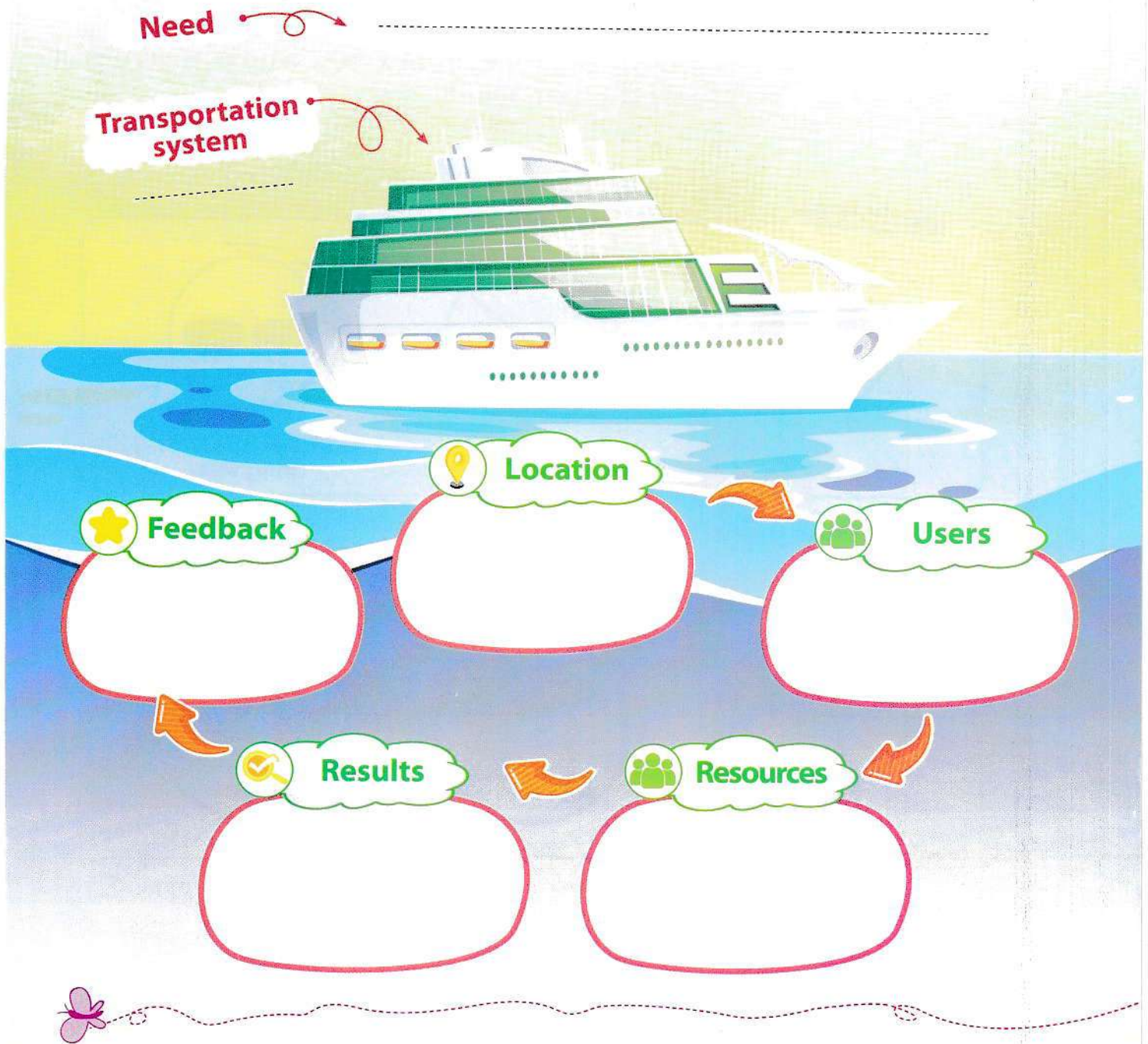
☐ No

- Parents' Tips: Activity (5): Help your child understand the steps of designing a transportation system through the given diagram, then let him/her design the transportation system in the opposite page using the same pattern.
- Aim: Design a transportation system diagram.





From your understanding of the previous diagram, complete the following:



○ **Subject integration:**

- **English:** • Reading comprehension (informational text).

• Use graphic organizers to plan writing.

- **Science:** Engineering design process: (Assess the impact of products and systems with modeling).

○ **Life skills:** Critical thinking - Problem solving - Decision making - Verbal communication.



# Lesson 5

## Floating Magnets

### Experiment Time

Let us do an experiment to see how magnets float; then answer:

#### Tools



Clay



Pencil



2 Ring (circular) magnets

#### Steps



1 Fix the pencil upright in a piece of clay.



2 Slide the 1<sup>st</sup> ring magnet down the pencil to rest down.



3 Slide the 2<sup>nd</sup> ring magnet down the pencil over the 1<sup>st</sup> magnet.

- **Parents' Tips:** Recall with your child what he/she learned when we approach two like magnets to each other, then assist him/her to follow the steps of the experiment and let him/her predict the results and record observations.
- **Aims:** Identify the repulsion force between two like magnets.





## Observation

**Tick (✓) your observation:**

- ☐ The 2 magnets will rest down above each other.
- ☐ The magnet will float in air.



## Conclusion

The magnets float, due to the repulsion force between the two like pole magnets.

### Complete:

- 1** Like magnetic poles .....
- 2** Unlike magnetic poles .....
- 3** We can't see the magnetic fields, but we can observe its .....



#### ○ Subject integration:

- **English:** Ask and answer questions about the experiments.
- **Science:** Perform an experiment and write observation.

○ **Life skills:** Critical thinking - Problem solving - Self-management - Decision making - Verbal communication.





## Transportation Innovations

Engineers use innovations to make systems work better.

**Activity 1** Read & learn, then answer:

Trains were invented to travel long distances more quickly. We are always doing our best to improve trains to be faster & safer means of transportation.

### In the past:

- Animals were used to cross long distances.

**ex:** Horse-drawn carriages, allowed people to travel far with goods.

**Advantages:** Low cost.

**Disadvantages:** Very slow.

- **Parents' Tips:** Activity (1): Discuss with your child how engineers do a great job to innovate new options to make transportation systems better by giving him/her some examples like how they use powerful magnets in inventing new trains, then assist him/her to understand the advantages and disadvantages of each.
- **Aim:** Identify advantages and disadvantages of new transportation technology.



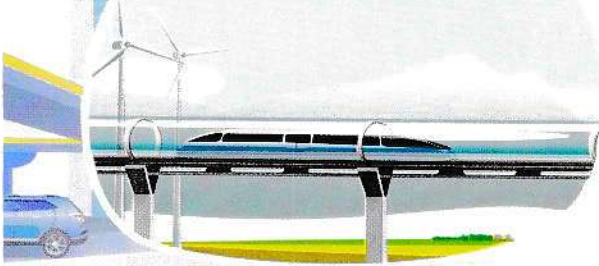


### Maglev train



- ✳ Uses powerful magnets.
- ✳ The magnetic force makes the train float above tracks.
- ✳ **Advantages:** It moves smoothly, quiet & very fast ( $> 480$  km/hour).
- ✳ **Disadvantages:** Expensive.

### Hyper loop train



- ✳ Uses powerful magnets on the track & in the sled's engine push the pods along the tracks.
- ✳ Transport people & goods through large tubes.
- ✳ **Advantages:** Doesn't need much energy to run nor does it make pollution, it also moves very fast ( $> 1200$  km/hour).
- ✳ **Disadvantages:** Too expensive & engineering challenges are too difficult.



**Search for other means of transportation that use magnets.**

○ **Subject integration:**

- **English:** Reading comprehension (informational text).
- **Science:** Explain the characteristics and scope of technology with support.

○ **Life skills:** Critical thinking - Problem solving - Decision making - Reading.





### From your pervious reading, tick (✓):

- 1 ..... use innovations to make systems work better.  
☐ Doctors ☐ Engineers
- 2 ..... train(s) use(s) powerful magnets.  
☐ Hyperloop only ☐ Malgev and Hyperloop
- 3 In the past animals used to move people & goods for long distances with ..... cost, but their speed was .....  
☐ low - very slow ☐ high - very fast
- 4 ..... train transports people through large tubes.  
☐ Maglev ☐ Hyperloop

### Write down the advantages & disadvantages of Malgev train & Hyperloop train:

	Advantages	Disadvantages
Malgev train		
Hyperloop train		

○ **Parents' Tips:** Help your child answer the given questions regarding his/her understanding to the previous activity.





## Building a New Capital

### Activity 2 Read & learn:

There is an exciting and promising project happening in Egypt, the "New Capital", it will be a smart city with a lot of new technologies that will provide services that will ease people's lives as well as keeping them safe.



**Sensors**  
to report smoke  
or fires directly to  
emergency services.



**Smart technology  
(cameras)**  
will also monitor accidents  
& amount of traffic.



**Airport  
security system  
& baggage  
scanners.**



**Search to find more technological ideas that you would like to see in the New Capital.**



- **Parents' Tips: Activity (2):** Let your child read and understand the latest technological innovations that make life easier and safer in the New Capital.
- **Aim:** Imagine new technology included in a smart city.
- **Subject integration:**
  - **English:** Reading comprehension (literature).
  - **Information and communication technologies:** Explain how digital technologies can improve and develop how we live and work.
- **Life skills:** Critical thinking - Problem solving - Verbal communication.



# Lesson 6

## The Parts of a Computer



Computer system is a set of equipment and software that work together to do a job.



### Activity

Read and skim the new words in the text to learn about the different computer parts, then answer:

A

### Input



are devices used to put data into the computer.

ex: • Keyboard.  
• Mouse.

B

### Processor

The central processing unit (CPU) is the "Brain" of the computer; it follows the orders & processes the information, then sends the data to the output devices.



C

### Output



are devices that allow the user to see the result.  
ex: Monitor.

### Motherboard



is where all the computer parts connect & communicate.

### Memory (RAM)



stores data in the short term so the CPU can use it.

### Storage






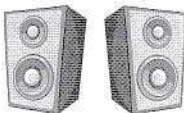


is the device which stores data, in the long term, like computer programs.

- **Parents' Tips: Activity:** Let your child identify the internal & external parts (components) of the computer and understand how they connect and work together, then let him/her answer the given questions.
- **Aim:** Determine the components of a computer and their functions.





Tick (✓) to sort the following devices into “Input devices” & “Output devices”:

Devices		Input	Output
Monitor			
Mouse			
Printer			
Speakers			
Microphone			
Camera			



○ **Subject integration:**

- **English:** Reading comprehension (informational text).
- **Information and communication technologies:** Compare and contrast the functions of different computer concepts, including hardware, software, and connectivity.

- **Life skills:** Critical thinking - Verbal communication.



# Lesson 7

## My Turn

### Activity

Read, then answer:

1 Sally... where are you and your brother? We are very late and we must reach your school in 30 minutes.

2 OK, mom. I'll be ready in few minutes.

3 Leave your phone! It's not the suitable time to play games while preparing your bag. Sally; please move faster.

4 Yes, mom!! I'm coming.

5 why are you late?! Mom is very angry.

6 I was finishing my assignment because you kept playing games on my computer last night and I was not able to finish earlier.

7 Why didn't you use the laptop earlier?!

8 Why didn't you play your games after finishing my assignment?!

- **Parents' Tips: Activity:** Assist your child to read the conversation and analyze the problem, then discuss with him/her the positive and negative impacts of technologies on people communication, then let him/her answer the questions.
- **Aim:** Identify a problem and possible solutions in a story.





**“When we communicate, we are connecting with each other.”  
And the way we choose to communicate with can be:**

**Positive**

**Negative**

**Tick (✓):**

- 1** Do you think Sally and her brother are communicating well?  
☐ Yes ☐ No
- 2** To solve their problem, should they manage the time of using the computer together?  
☐ Yes ☐ No
- 3** Should Sally's brother spend all the time playing games?  
☐ Yes ☐ No

People think that we can be perfectly connected using technology, but in fact the **abuse of technology prevents us** from **communicating** with people **face-to-face** like spending a good time with family and friends.



**Search to know more about the technology abuse and its impact on our lives.**

**Subject integration:**

- **English:** Reading comprehension (literature).
- **Economics and Applied sciences:** Explain the importance of showing consideration and respect for family members.

**Life skills:** Empathy - Problem solving - Critical thinking - Decision making - Verbal communication.



# Lesson 8

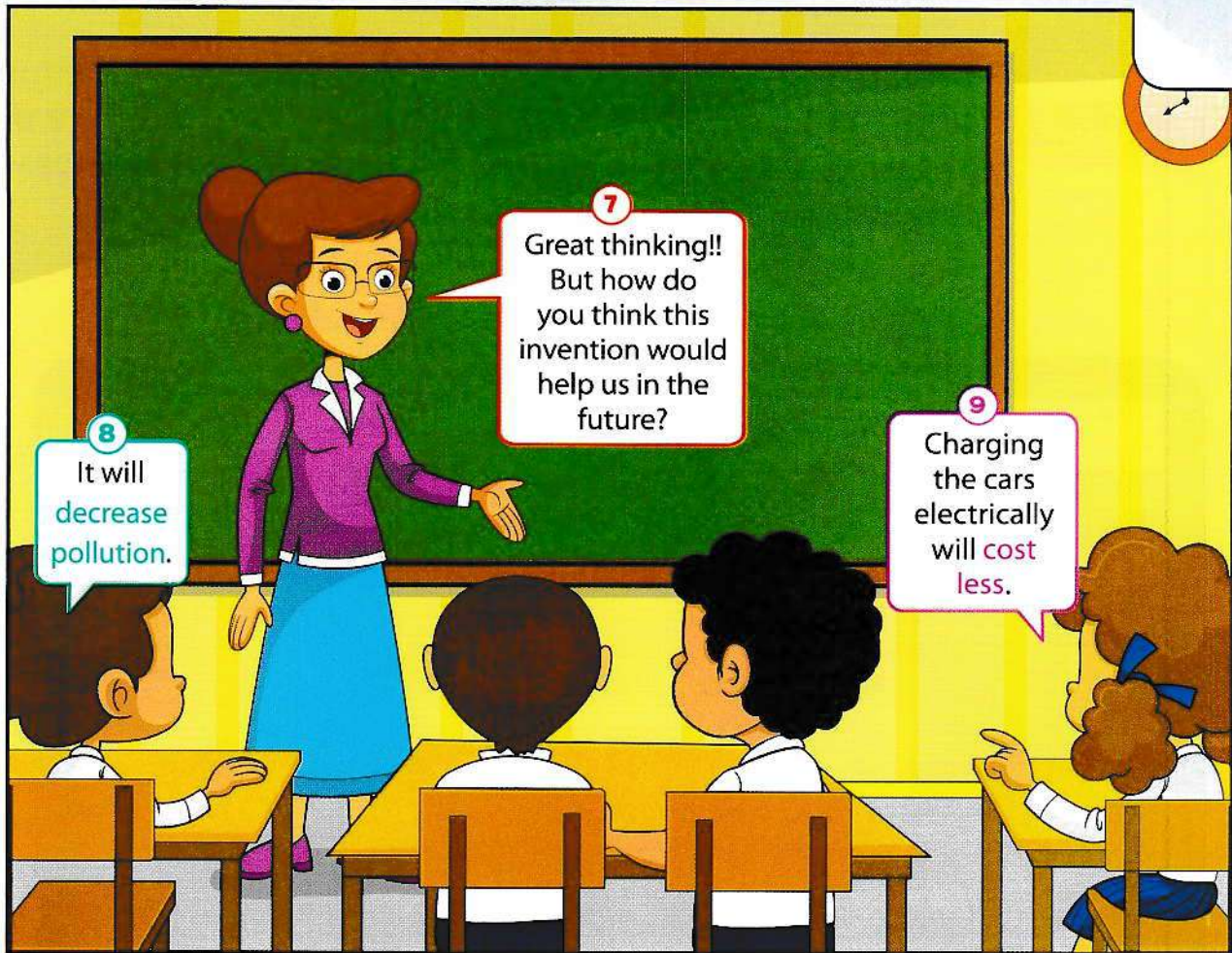
## In the Year 2040

### Activity 1 Read and learn:



- **Parents' Tips: Activity (1):** Help your child read the discussion between the teacher and students to identify their imaginations about life in the future, then collaborate with him/her to create a plan of his/her future considering tools which they will use in the future.
- **Aim:** Create a plan to work cooperatively.





**Search about how the mobile phones could be like in 2040 (in the future).**



○ **Subject integration:**

- **English:** Reading comprehension (literature).
- **Vocational fields:** Identify and demonstrate good interpersonal skills at school and home.

- **Life skills:** Verbal communication - Critical thinking - Collaboration.

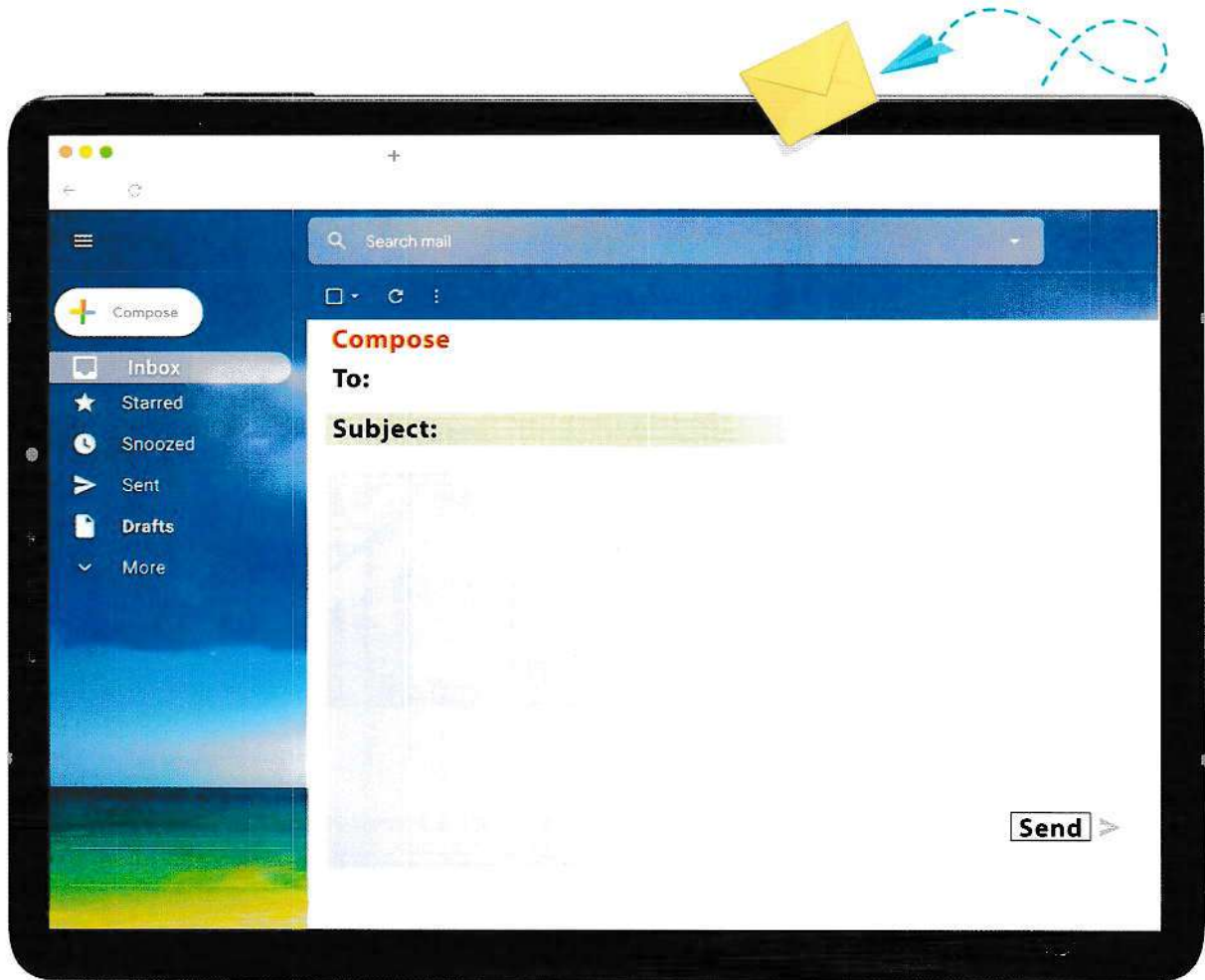




## Our Plan

### Activity 2

Send an e-mail to your teacher to take his/her opinion regarding the transportation problems that will face us in the future, explaining your proposal to solve these problems.



- **Parents' Tips: Activity (2):** Assist your child to write an e-mail.
- **Aim:** Design a solution to a problem.
- **Subject integration:**
  - **English:** Foundational skills (write complete sentences).
- **Life skills:** Verbal communication - Problem solving - Self-management.

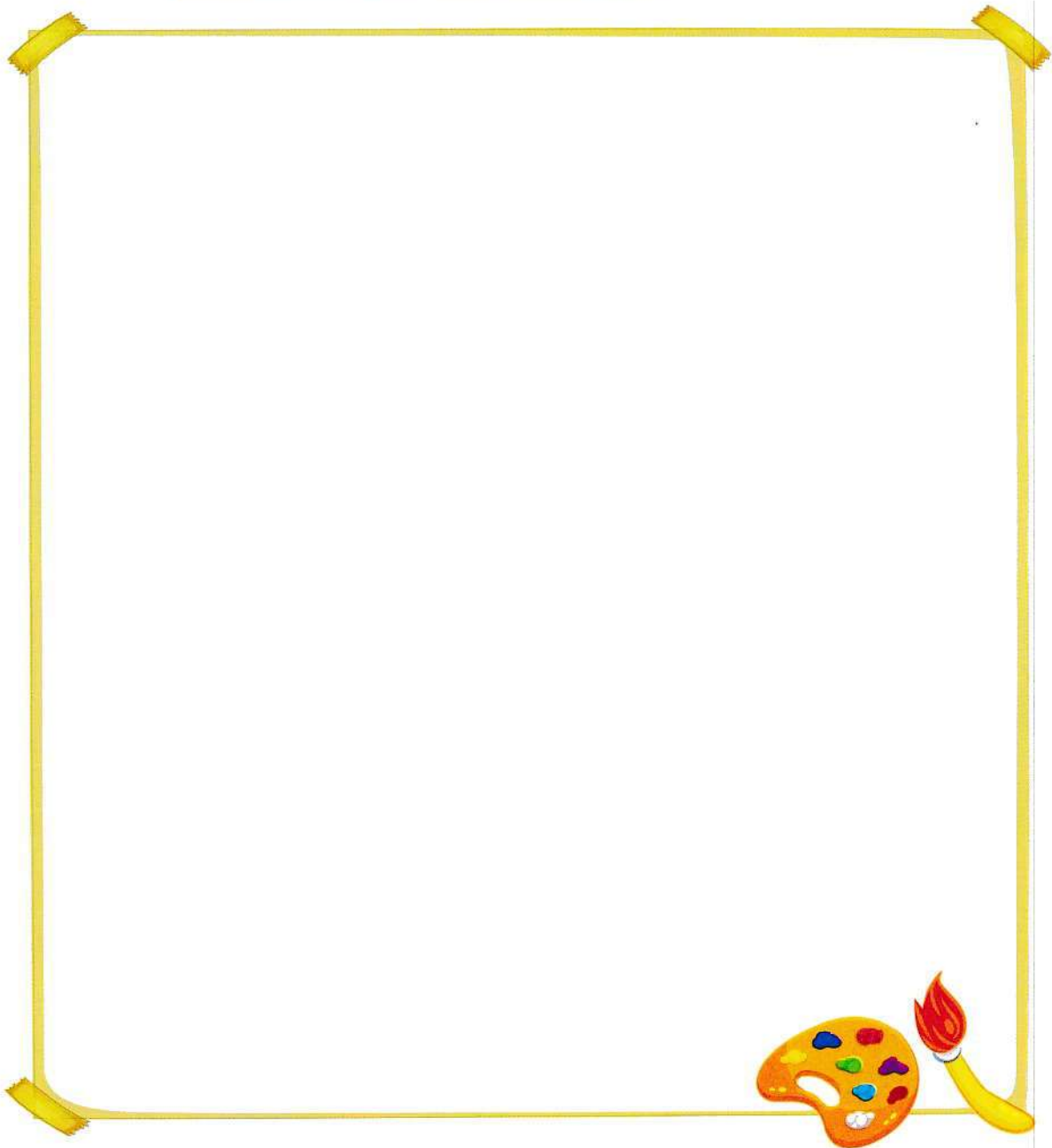






### Activity 3

Use your imagination, then draw a poster to represent how the futuristic means of transportation will be in 2040.



- **Parents' Tips: Activity (3):** Let your child imagine new ways of communication that will be used in the future, then help him/her draw them in a poster.
- **Aim:** Using imagination to describe things.
- **Subject integration:**
  - **Visual art:** Producing visual art.
- **Life skills:** Critical thinking - Self-management.



# Lesson 9

## Getting Feedback

**Activity 1** Let your friend or parent review your poster & give you feedback:

Reviewer's name .....

★ I like your poster design because .....

- ☐ It is colorful.
- ☐ Drawings describe your imagination well.
- ☐ Drawings are colored neatly.

★ Points that need to be improved are:

.....

.....

.....

.....

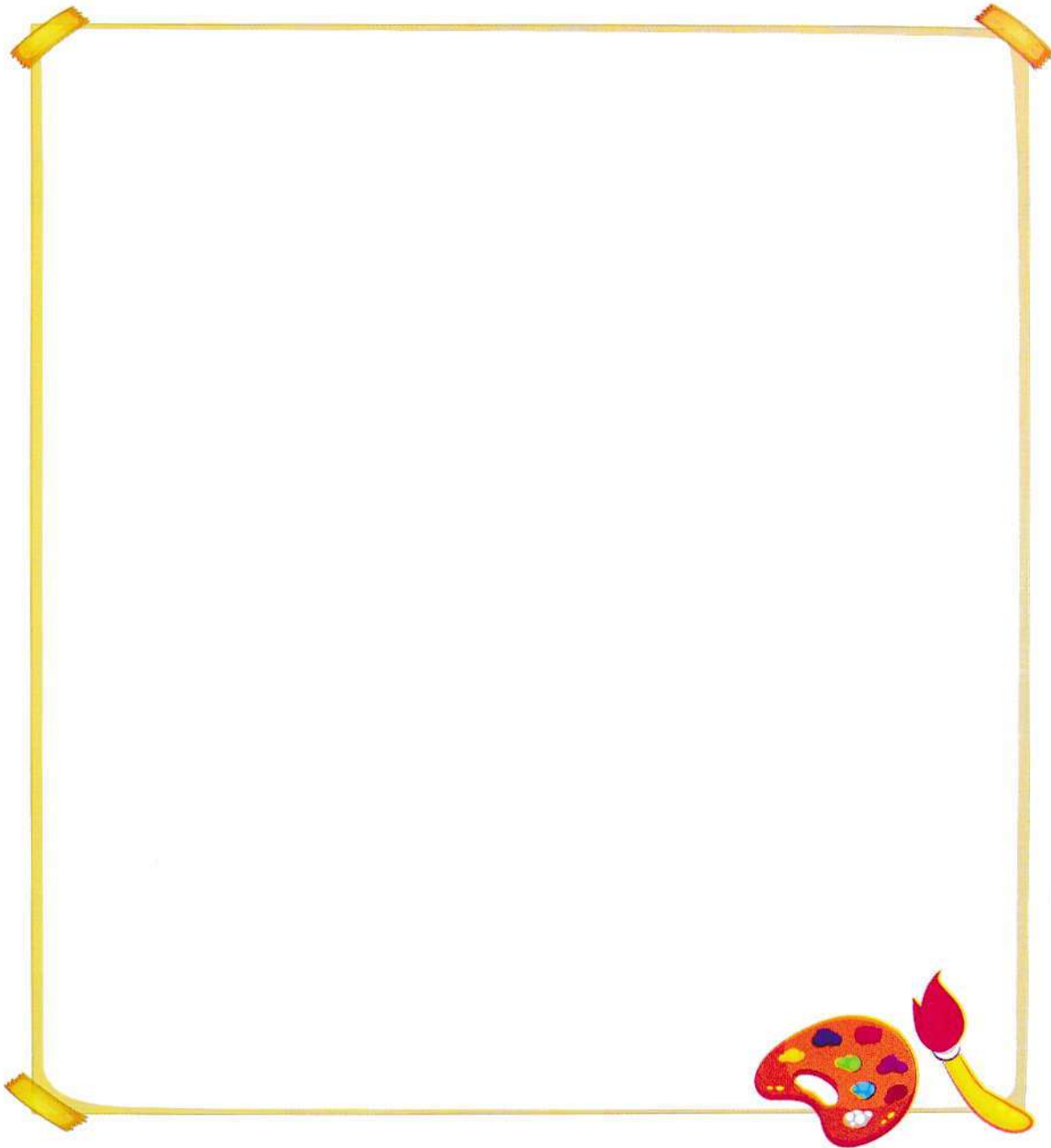
- **Parents' Tips:** Activity (1): Let your child share his/her designed poster (in the previous page) with you or a friend to receive your feedback.
- **Aim:** Communicate ideas within a group to improve a design.
- **Subject integration:**
  - English: Foundational skills (write complete sentences).
- **Life skills:** Collaboration.





## Activity 2

Draw an illustration that shows Sally & Ramy using your 2040 futuristic design:



- **Parents' Tips: Activity (2):** Let your child draw what he/she imagined for his/her futuristic idea including Sally & Ramy in the design.
- **Aim:** Be creative in determining the setting for a futuristic story.
- **Subject integration:**
  - Visual art: Producing visual art.
- **Life skills:** Critical thinking - Self-management.



Lesson  
**10**

# Project

Futuristic story

Using your writing skills, write a futuristic story to represent how Sally & Ramy will stay connected in 2040 using your model.

Brainstorming  
& planning



Drafting



Reviewing

- ☐ Did I use correct capitalization?
- ☐ Did I use correct punctuation?
- ☐ Did I spell my words correctly?
- ☐ Are my sentences logical?







Publish here

A large rectangular box with an orange border, containing five horizontal dashed lines for writing.



**Tick (✓) the learning outcomes you have learned through the chapter:**

- ☐ How people stay connected in the community.
- ☐ The challenges in connecting with others.
- ☐ Technological inventions served our needs through time.
- ☐ Why do people need transportation?
- ☐ Trading and Bartering.
- ☐ Transportation innovations.
- ☐ Designing transport systems.
- ☐ Parts of the computer.
- ☐ Imagining how life would be like in 2040.









Find the computer parts names:

A	P	E	N	D	R	I	V	E	L
H	A	R	D	D	I	S	K	A	L
L	F	I	N	D	O	C	U	M	A
F	L	O	P	P	Y	A	T	O	P
W	H	A	M	R	O	N	U	U	T
T	I	S	M	I	G	N	T	S	O
I	S	S	N	N	A	E	C	E	P
M	O	N	I	T	O	R	E	P	I
C	A	B	L	E	N	H	T	E	T
D	C	O	M	R	A	M	P	L	E



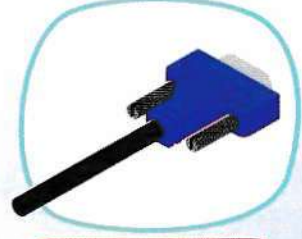
Scanner



Pen drive



Monitor



Cable



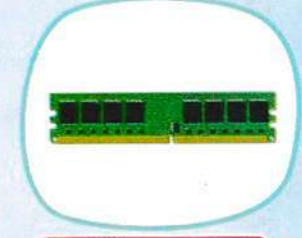
Mouse



Printer



Hard disk



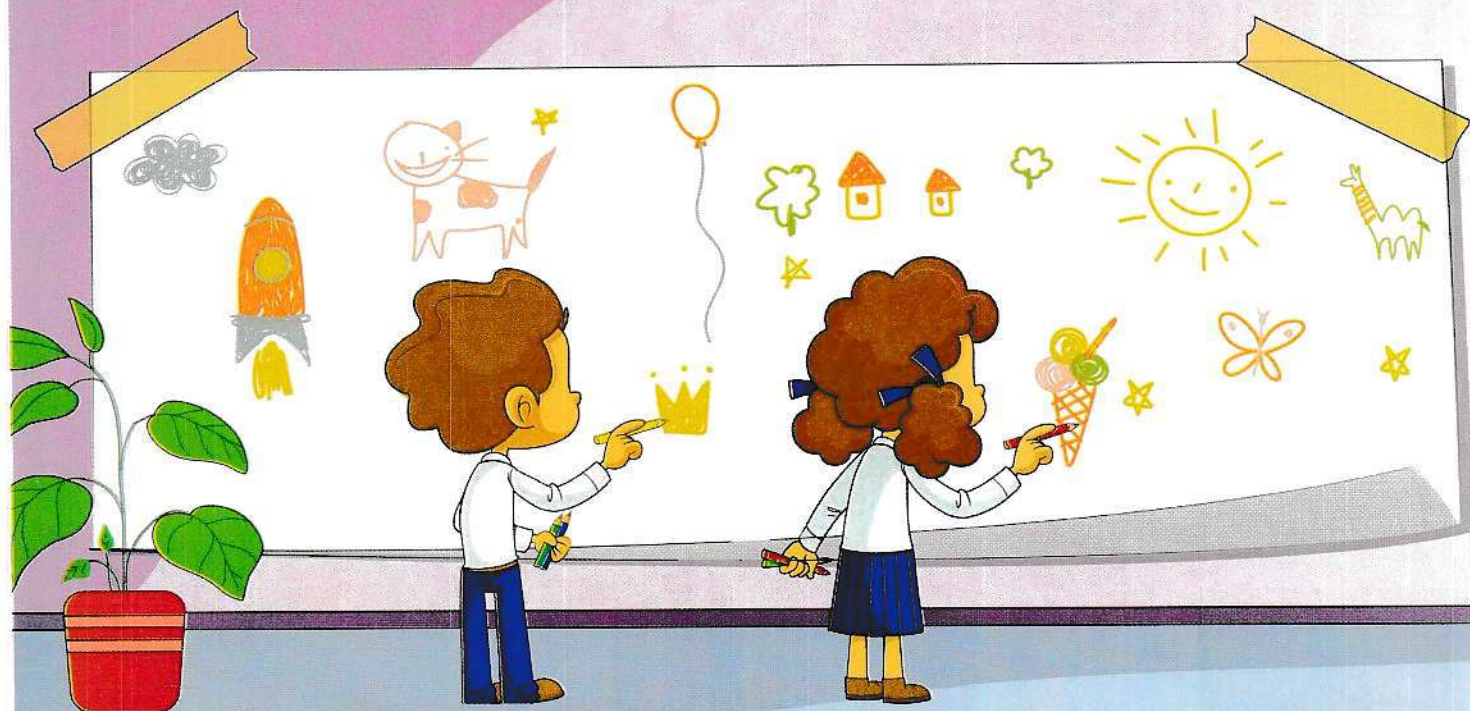
RAM



## CHAPTER

## 3

# "Connecting with Community"



## Chapter Overview



### Discover:

- Students explore articles in newspapers prior to creating class newspapers.
- Students design invitations to the Share Project.



### Learn:




- Students collaborate to write a class newspaper.
- Students write articles, produce a public service message and design a cartoon to explore the community around them in different ways.



### Share:

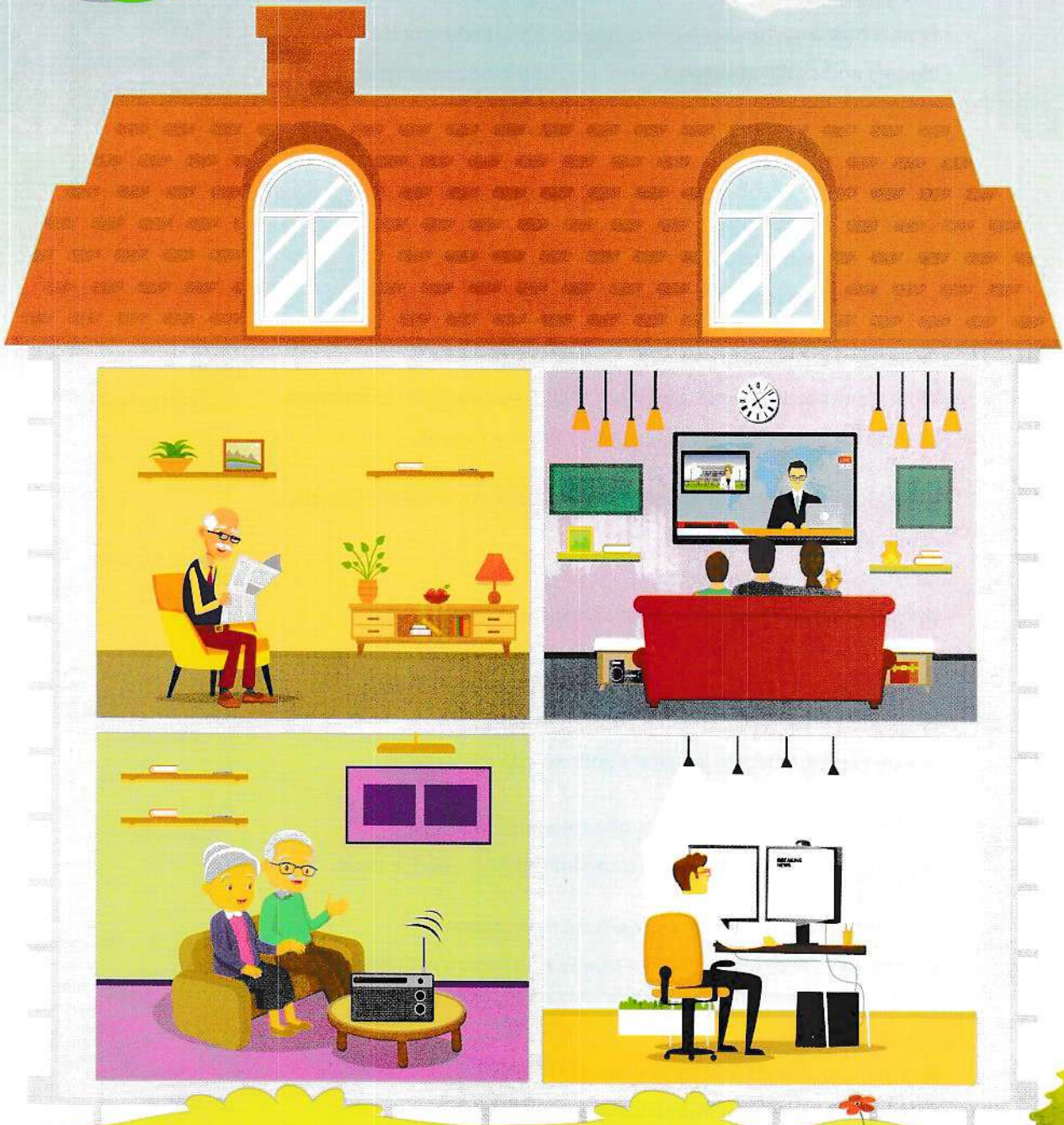
- Students work collaboratively to produce a mural that represents various topics and their connections to the community.



Lesson	Pacing Guide	Key vocabulary
<b>Discover</b>  1	<b>Students will:</b> <ul style="list-style-type: none"> <li>- Predict how a newspaper helps connect within a community.</li> <li>- Identify and explain the function of various newspaper elements.</li> <li>- Produce an invitation to attend the Share Project.</li> </ul>	<ul style="list-style-type: none"> <li>- By-line</li> <li>- Headline</li> <li>- Reporter</li> </ul>
2	<b>Students will:</b> <ul style="list-style-type: none"> <li>- Analyze parts of a story.</li> <li>- Identify elements of a news article.</li> <li>- Script questions for interviewing a classmate.</li> </ul>	<ul style="list-style-type: none"> <li>- Interview</li> <li>- Reporter</li> </ul>
3	<ul style="list-style-type: none"> <li>- Examine the structure of a news story.</li> <li>- Write a news article about a member of the community or a classmate.</li> <li>- Identify the characteristics of an interesting news event.</li> </ul>	<ul style="list-style-type: none"> <li>- Newspaper</li> </ul>
<b>Learn</b>  4	<ul style="list-style-type: none"> <li>- Write an article about an important news event at the school or in the community.</li> <li>- Collaborate to improve writing.</li> <li>- Utilize strong opening and closing sentences in writing.</li> </ul>	<ul style="list-style-type: none"> <li>- News event</li> </ul>
5	<ul style="list-style-type: none"> <li>- Identify the characteristics of a strong public service message.</li> <li>- Produce a public service message for the class newspaper.</li> <li>- Use text and graphics in a digital public service message.</li> </ul>	<ul style="list-style-type: none"> <li>- Public service message</li> </ul>
6	<ul style="list-style-type: none"> <li>- Understand the characteristics of a cartoon.</li> <li>- Produce a four-panel cartoon to share information about a topic.</li> </ul>	<ul style="list-style-type: none"> <li>- Cartoon</li> <li>- Panel</li> </ul>
7	<ul style="list-style-type: none"> <li>- Collaborate with a group to produce a newspaper.</li> <li>- Contribute a piece of writing that shares information with the community.</li> </ul>	<ul style="list-style-type: none"> <li>- Editor</li> <li>- Graphic designer</li> <li>- Layout</li> </ul>
<b>Share</b>  8 9 10	<b>Students will:</b> <ul style="list-style-type: none"> <li>- Analyze the characteristics of a mural.</li> <li>- Calculate the area of a mural using individual panels.</li> <li>- Produce a draft of a panel for a class mural.</li> <li>- Give effective feedback.</li> <li>- Collaboratively produce a class mural.</li> <li>- Present mural panels to the community or class.</li> </ul>	<ul style="list-style-type: none"> <li>- Area</li> <li>- Mural</li> <li>- Feedback</li> <li>- Redesign</li> </ul>



## Scavenger Hunt



**“We always use Media to know what is happening in our community like “Radio, TV, Newspapers and Internet.”**



**Activity 1**

Identify the newspaper parts using the given words:

**Headline - Byline - Article - Cartoon - Advertisement**  
**- Caption - Weather - Sports**



Hello, today we will explore how newspapers help us stay connected to community.

**Daily NEWS**

#76

**ALEXANDRIA HEAVY RAINS**

By: K. Karim

In October of 2015, Alexandria experienced extreme rainfall. This was an unusual event.



Rainfalls covered streets.

The city was drenched with more than 20 cm of rain in just two days.

The water from heavy rains built up quickly. Pipes which were built to carry the water away were overwhelmed.

The local government began looking for ways to minimize the effects of heavy rains in the future, such as computer sensors that can measure water depth, better drains,...etc.

The heavy rains impacted the local environment and the citizens of Alexandria. Waters entered the street level of businesses and other buildings. Citizens helped one another get out safely home.

People shared food and supplies. Police helped guard the town.



wash  
your  
hands

**Do you know?**

Byline is a line at the top of an article in a newspaper giving the reporter's name.

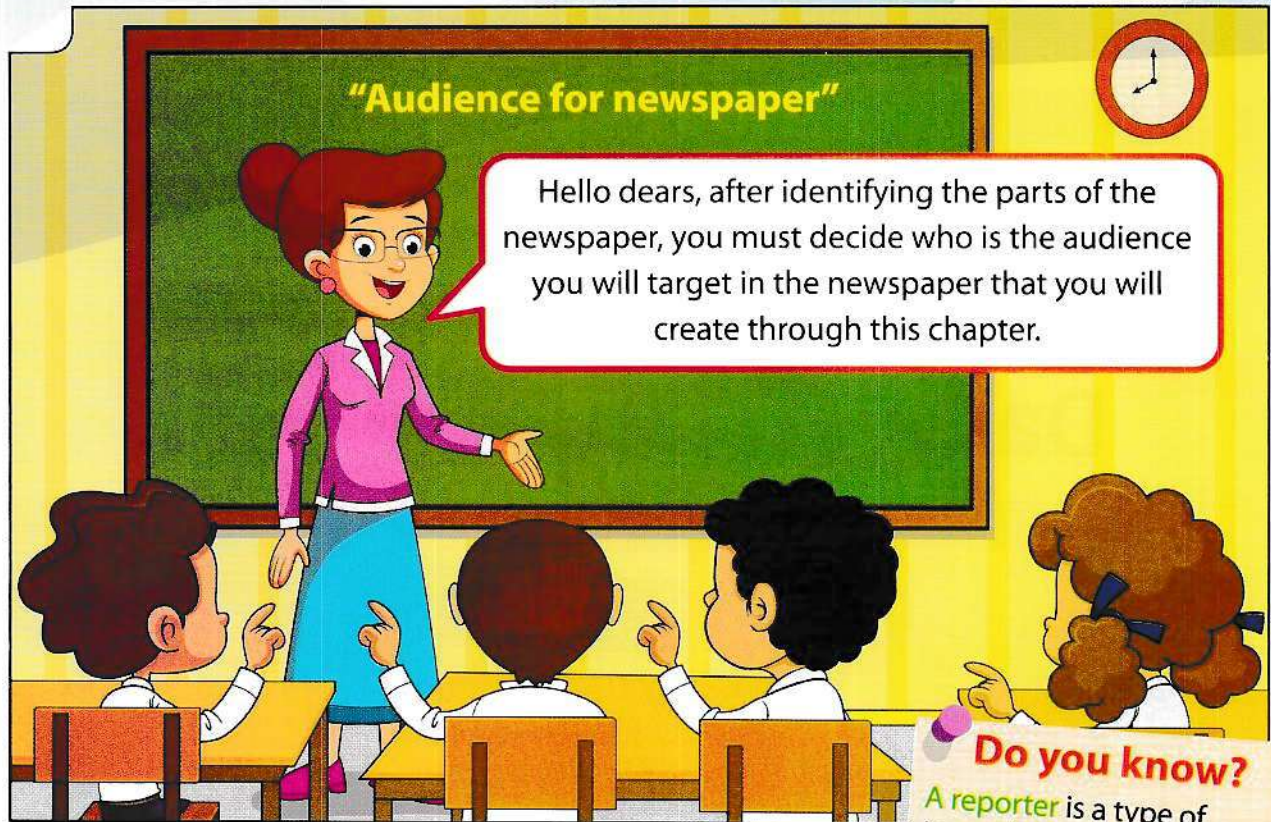


- Parents' Tips: Activity (1): Help your child identify the parts of the newspaper and explore how the newspaper helps us stay connected to our community.
- Aim: Identify various newspaper elements.
- Subjects integration:
  - English: Ask and answer the questions to demonstrate understanding of the text.
- Life Skills: Collaboration - Verbal communication.





## Activity 2 Read, then answer:



### Do you know?

A **reporter** is a type of journalist who collects information, then delivers all this information in the form of stories and articles.

### Tick (✓):

★ Who is the audience for your newspaper?

- ☐ Family.
- ☐ Teachers.
- ☐ Celebrity fans.
- ☐ Businessmen.
- ☐ Housewives.



- **Parents' Tips: Activity (2):** Assist your child to create his/her newspaper and decide who is his/her target audience or who he/she will target.
- **Aim:** Predict how a newspaper helps people connect within a community.
- **Subjects integration:**
  - **English:** Ask and answer the questions to demonstrate understanding of the text.
- **Life Skills:** Verbal communication.



**Activity 3**

**Write an invitation to ask your target audience to attend your final project about your "Newspaper":**

**You're Invited**

WHAT: .....

WHEN: .....

Date: .....

Time: .....

WHERE: .....

WHY: .....

**Hope to see you there!**

I need your help: .....

.....

.....

.....

.....



- **Parents' Tips: Activity (3):** Help your child write an invitation asking the audience he/she chose to attend his/her final project about newspaper.
- **Aim:** Produce an invitation to attend the share project.
- **Subjects integration:**
  - **English:** Write complete sentences using punctuation and prepositions as appropriate.
- **Life Skills:** Verbal communication.



# Lesson 2

## Community Member Interview

### Activity 1 Read, then answer:



- Parents' Tips: Activity (1): Help your child make an interview with his/her classmate using the questions words, then let him/her underline the answers to the given questions using the given color codes in the opposite page.
- Aim: Identify various questions for interviewing a classmate.





**From your previous understanding, read the article, then underline the answers to the following questions using the given color codes:**

- 1** Who was the article written by?
- 2** What events have happened?
- 3** Where did these events occur?
- 4** When did these events occur?
- 5** Why did these events occur?

### Color Code:

Who = **Blue**

What = **Yellow**

Where = **Green**

When = **Red**

Why = **Orange**

#### Local School Meets Food Drive Goal

February 20<sup>th</sup>, 2014

This week P.S. Elementary students met their goal of collecting 1000 nonperishable food items for the local food bank. For the last month students have been asking friends, family, and neighbors to donate nonperishable food items for the drive. The support from the community was huge, with the collection bins filling faster than they could be emptied.

Student Hailey Jones says "I feel proud that our school collected so many cans, and that we were able to help others." The food bank has been thankful for the donation, and said that it would help feed local families for the next several weeks.

By Louise Harris, CVA News



#### Subjects integration:

- English: Ask and answer the questions to demonstrate understanding of the text.
- Life Skills: Verbal communication.





## Activity 2 Read, then answer:

1 A : **What** do you **want** to eat for lunch?

B : I **want** to eat .....

2 A : **Where** do you **live**?

B : I **live** in .....

3 A : **How** old **are** you?

B : I'm .....

4 A : **When** **were** you **born**?

B : I **was born** in .....

5 A : **Who** **is** your friend that you want to play with?

B : My friend **is** .....

6 A : **Why** do you **like** your family?

B : I **like** my family **because** .....



- **Parents' Tips:** Activity (2): Help your child read and understand the following questions, then let him/her answer them on his/her own.
- **Aim:** Identify various questions for interviewing a classmate.
- **Subjects integration:**
  - **English:** • Write complete sentences.
  - Ask and answer the questions to demonstrate understanding of the text.
- **Life Skills:** Verbal communication.





## My Questions and Answers

### Activity 3

Record your interview "Questions & Answers" in the shown table (with respect to the given question words):

Interview notes with: .....

Questions	Answers
Who .....	
What .....	
Where .....	
When .....	
How .....	
Why .....	

- **Parents' Tips: Activity (3):** Help your child make an interview using the given question words he/she has learned, and record his/her questions and answers in the shown table.
- **Aim:** Script questions for interviewing a classmate.
- **Subjects integration:**
  - **English:** • Write complete sentences.
  - Ask and answer the questions to demonstrate understanding of the text.
- **Life Skills:** Verbal communication.





## News we want to read

### Activity 3 Read, then answer:

Look, Ramy, there is a fire in Apartment No. 8, I guess it started around noon.



Listen, a woman told the fireman that the tube popped because she had forgotten the oven on.



Oh, my God, but, how did it happen?

I hope there are no injuries.

### Answer the following questions:

- 1 What happened? .....
- 2 When did this happen? .....
- 3 Where did this happen? .....
- 4 How did this happen? .....
- 5 Why did this happen? .....

- **Parents' Tips:** Activity (3): Help your child read and understand the given news story, then let him/her answer the following questions.
- **Aim:** Examine the structure of a news story.
- **Subjects integration:**
  - **English:** Ask and answer the questions to demonstrate understanding of the text.
- **Life Skills:** Verbal communication.



## Plan For Writing

**Activity 1** Match each question to its answer to understand the story:

What is the story about?

Who was there?

What happened?

When did it happen?

Where did this happen?

Why is it important?

It was around noon when it all started.

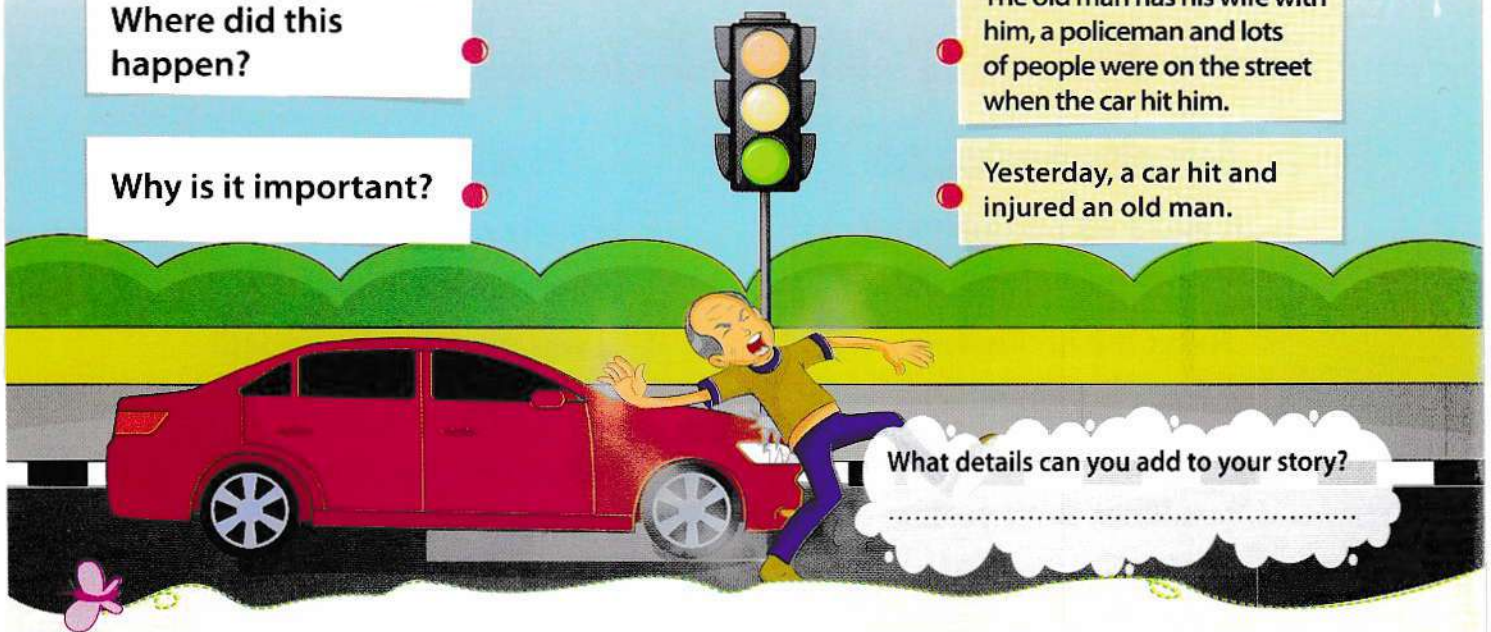
This story shows how important it is that people should follow the traffic lights.

Everything happened quickly when an old man crossed the street when the traffic light turned green.

It was on the main street, opposite to the supermarket.

The old man has his wife with him, a policeman and lots of people were on the street when the car hit him.

Yesterday, a car hit and injured an old man.



What details can you add to your story?

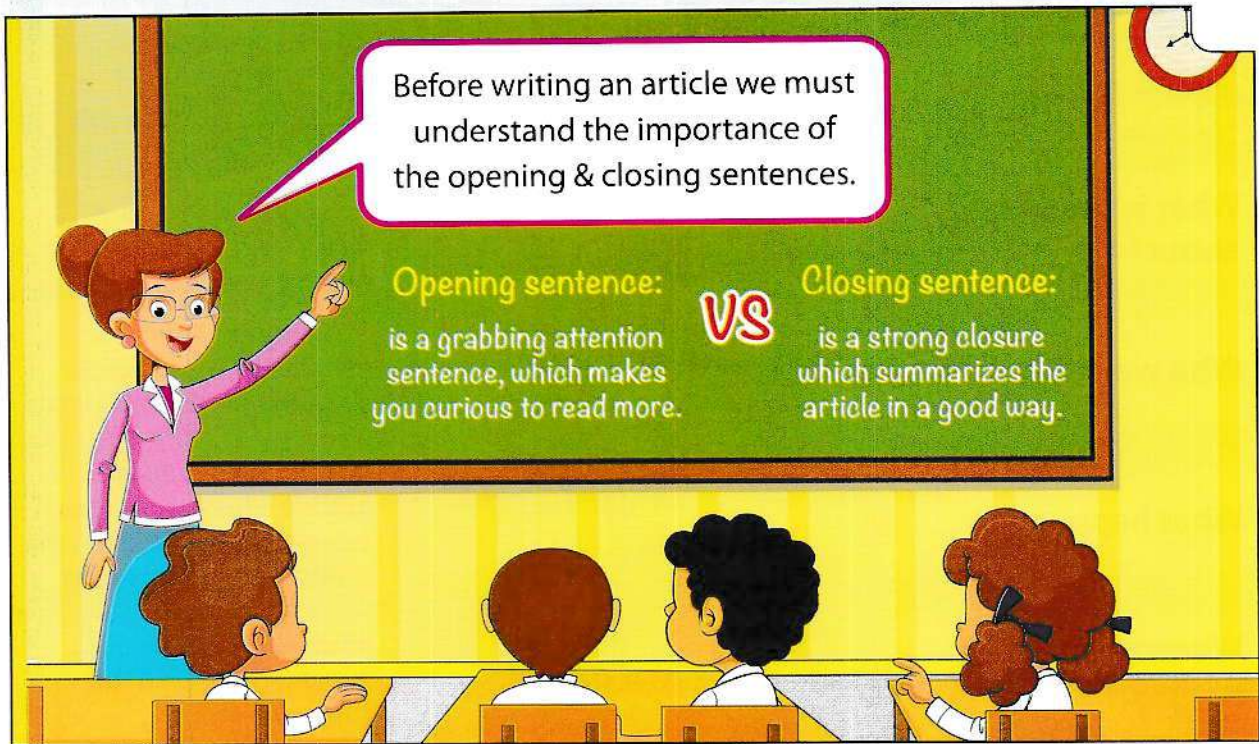
- **Parents' Tips:** Activity (1): Help your child match each question to its suitable answer.
- **Aim:** Examine the structure of a news story.
- **Subjects integration:**
  - **English:** Ask and answer the questions to demonstrate understanding of the text.
- **Life Skills:** Verbal communication.





## Activity 2

Read, then answer:



Tick (✓) the strong opening and closing sentences:

## Opening sentences:

- ☐ It was a very tough night.
- ☐ People can't stop talking about the accident.
- ☐ It was a boring movie.
- ☐ Ahmed's name made headlines since yesterday.

## Closing sentences:

- ☐ Finally, everyone left on good terms.
- ☐ I was glad the day ended!
- ☐ They don't like basketball.
- ☐ What a tough day!

- **Parents' Tips:** Activity (2): Assist your child identify the difference between opening sentences and closing sentences and understand their importance in writing an article, then let him/her guess the strong opening and closing sentences from the given.
- **Aim:** Utilize strong opening and closing sentences in writing.
- **Subjects integration:**
  - **English:** Ask and answer the questions to demonstrate understanding of the text.
- **Life Skills:** Verbal communication - Critical thinking.





## My News Article

### Activity 3

Now ask yourself the same questions in Activity (1) and write your own answers in the form of a paragraph:

Headline: \_\_\_\_\_

By: \_\_\_\_\_

Draw or Stick a picture

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



- **Parents' Tips:** Activity (3): Help your child answer the same questions in Activity (1) and write his/her own answers with respect to the opening and closing sentences.
- **Aim:** Collaborate to improve writing.
- **Subjects integration:**
  - English: Write complete sentences using punctuation and prepositions as appropriate.
- **Life Skills:** Collaboration - Verbal communication.



# Lesson 5

## Public Service Message

**Activity 1** Look at the advertisements below, then tick (✓):

Advertisement (1)



Advertisement (2)



Advertisement (3)



What may you like about the advertisements?

Adv. (1)

Adv. (2)

Adv. (3)

- 1 I liked the colors.
- 2 The drawings are great and very attractive.
- 3 The words are meaningful.
- 4 The audience will sympathize with the advertisements.
- 5 The advertisement shows a fact.
- 6 The message is clear and easy to understand.

- **Parents' Tips:** Activity (1): Help your child look at the given advertisements, then let him/her answer the given questions to give a feedback regarding his/her opinion about the three advertisements.
- **Aim:** Identify the characteristics of a strong public service message.
- **Subjects integration:**
  - **English:** Ask and answer the questions to demonstrate understanding of the text.
  - **Art:** Collaborate with peers to create an art exhibition.
- **Life Skills:** Communication - Critical thinking.

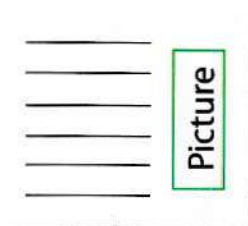
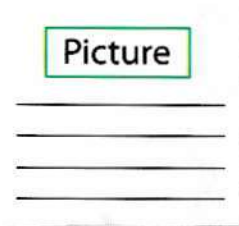
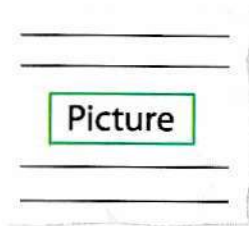




## Planning a Message

**Activity 2** Follow the steps to create your own advertisement in a newspaper:

**(1) Choose the layout of your advertisement:**



**(2) Write a good public service message:**

.....

**(3) Tick (✓) the goals of your advertisement:**

- ☐ The message is clear and easy to understand.
- ☐ The message is supported by facts.
- ☐ The audience is able to sympathize with those affected by issue.

**(4) Create your own advertisement:**



- **Parents' Tips:** Activity (2): Help your child follow the steps to create his/her own advertisement for a newspaper project.
- **Aim:** Produce a public service message for the class newspaper.
- **Subjects integration:**
  - **English:** Ask and answer the questions to demonstrate understanding of the text.
  - **Art:** Collaborate with peers to create an art exhibition.
- **Life Skills:** Verbal communication - Collaboration.

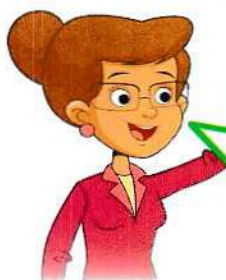


# Lesson 6

## Cartoon

### Activity 1

Read, then arrange the following panels in a suitable order:



Today, we will create a cartoon in our newspaper, it is a series of drawings that tell us about a topic, usually in a funny way.



- Parents' Tips: Activity (1): Help your child read and understand the characteristics of a cartoon in a newspaper, then let him/her arrange the panels in a suitable order.
- Aim: Identify the characteristics of a cartoon.
- Subjects integration:
  - English: Ask and answer the questions to demonstrate understanding of the text.
  - Art: Collaborate with peers to create an art exhibition.
- Life Skills: Verbal communication.





## Planning My Cartoon

### Activity 2 Follow steps to create your own cartoon:

#### (1) What topic will your cartoon be about?

- ☐ First day at school. ☐ Eating breakfast before going to school.  
☐ Pollution. ☐ Gatherings.

#### (2) Who are the characters in your cartoon?

.....

#### (3) What are the setting and action in each panel?

Setting: .....

Action: .....

Panel (1)

Setting: .....

Action: .....

Panel (2)

Setting: .....

Action: .....

Panel (3)

Setting: .....

Action: .....

Panel (4)



- Parents' Tips: Activity (2): Help your child follow the steps to create his/her own cartoon for a newspaper project.
- Aim: Design a Cartoon for the class newspaper.
- Subjects integration:
  - English: Ask and answer the questions to demonstrate understanding of the text.
  - Art: Collaborate with peers to create an art exhibition.
- Life Skills: Verbal communication.

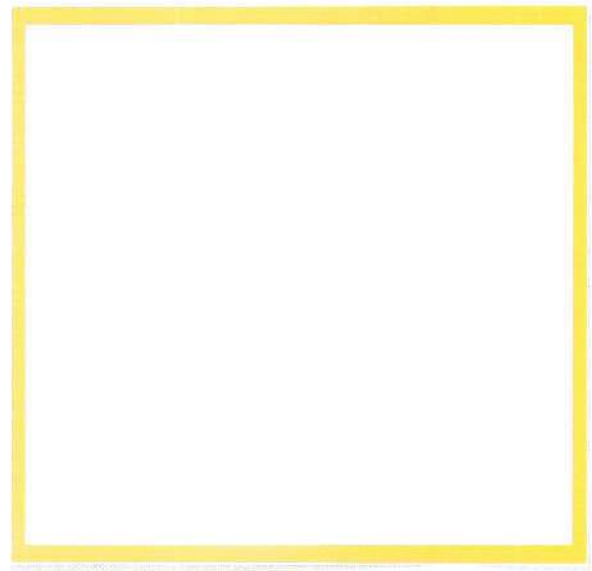
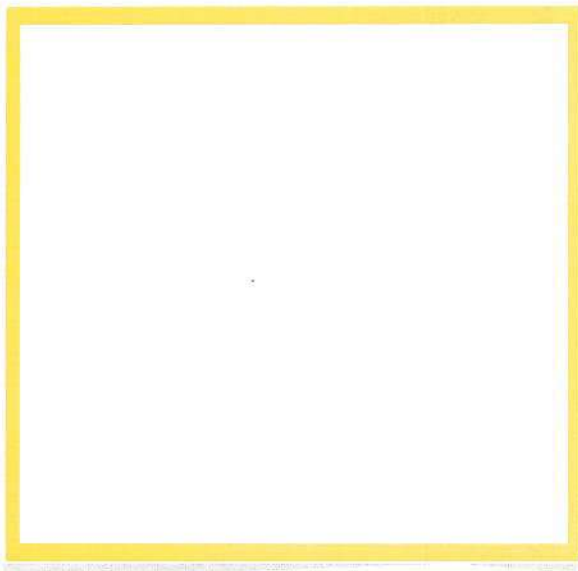
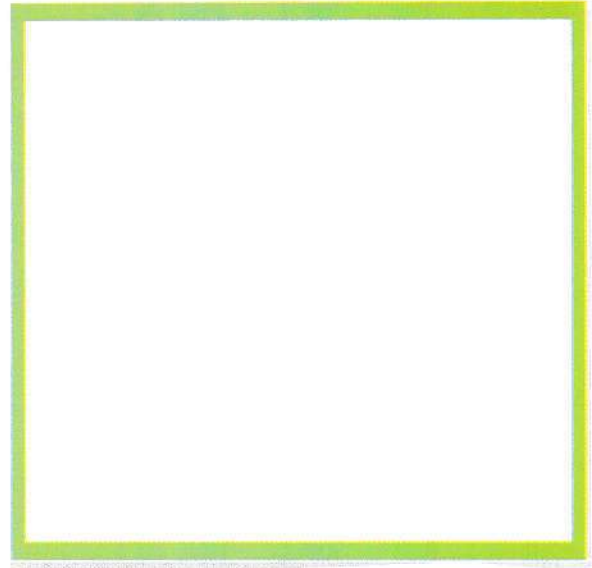
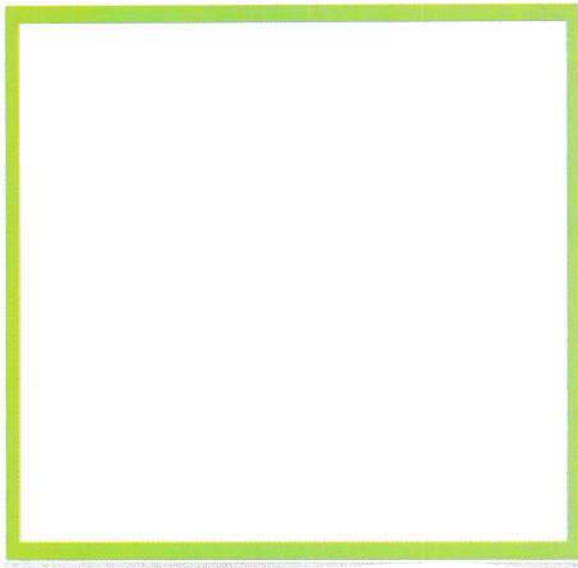




## Cartoon Template

### Activity 3

Create your own design to continue the steps of planning your cartoon:



- **Parents' Tips:** Activity (3): Assist your child to continue the steps to create his/her own cartoon for a newspaper project.
- **Aim:** Design a cartoon for the class newspaper.
- **Subjects integration:**
  - **English:** Ask and answer the questions to demonstrate understanding of the text.
  - **Art:** Collaborate with peers to create an art exhibition.
- **Life Skills:** Verbal communication.





**Activity 4** Read, then answer:**There are different shapes of bubbles:**

It contains the character's words that are spoken out loud.

**"Speech bubble"**

It shows what a character is thinking about, but doesn't say aloud.

**"Thought bubble"****Tick (✓):**

- 1 Cartoon is a series of images that tell us most of a story.  
☐ Yes ☐ No
- 2 From Activity (1), "Sara! Come, look!" is a ..... bubble.  
☐ speech ☐ thought
- 3 From Activity (1), "Wonderful!" is a ..... bubble.  
☐ speech ☐ thought
- 4 Look at this panel in Activity (1), and analyze it.

- |               |  |                                      |
|---------------|--|--------------------------------------|
| ★ Setting:    | <input type="checkbox"/> Hisham's room | <input type="checkbox"/> Living room |
| ★ Characters: | <input type="checkbox"/> Hisham        | <input type="checkbox"/> Sara        |
|               | <input type="checkbox"/> Mum           |                                      |
| ★ Action:     | <input type="checkbox"/> Talking       | <input type="checkbox"/> Playing     |



- **Parents' Tips:** Activity (4): Help your child read and understand that there are different shapes of bubbles used in the panels of the cartoons, then let him/her answer the questions.
- **Aim:** Identify the characteristics of a cartoon.
- **Subjects integration:**
  - **English:** Ask and answer the questions to demonstrate understanding of the text.
- **Life Skills:** Verbal communication.



# Lesson 7

## Newspaper Team Roles

### Activity 1 Read, then answer:



#### Editor

- He/She reviews the pieces selected to be sure there is a variety of topics.



#### Graphic Designer

- He/She adds additional drawings to the newspaper to go along with the pieces of writing selected.



#### Layout Specialist

- He/She decides where each piece of writing will go in the newspaper.



#### Manager

- He/She oversees the work to ensure everyone understands their roles and the group completes the work on time.

### Tick (✓):

- ..... makes sure that there is a variety of topics.  
☐ Graphic designer      ☐ Editor
- ..... is responsible for overseeing the work.  
☐ Layout Specialist      ☐ Manager
- ..... adds additional drawings and designs to the newspaper.  
☐ Graphic designer      ☐ Layout specialist
- ..... decides where each piece of writing will go.  
☐ Editor      ☐ Layout specialist

- **Parents' Tips:** Activity (1): Help your child read and understand the roles of each newspaper team members, then let him/her answer the questions.
- **Aim:** Identify newspaper team roles.
- **Subjects integration:**
  - **English:** Ask and answer the questions to demonstrate understanding of the text.
- **Life Skills:** Verbal communication.





## Newspaper Plan

### Activity 2 Complete your newspaper plan:



#### My Teamwork

- ✱ Who is responsible for writing a variety of topics and articles?

Name:.....

- ✱ Who is responsible for reviewing the pieces selected for the newspaper?

Name:.....

- ✱ Who is responsible for adding additional drawings to the newspaper?

Name:.....

- ✱ Who is responsible for deciding where each piece of writing will go in the newspaper?

Name:.....

- ✱ Who is responsible for following the work of the team?

Name:.....

- **Parents' Tips: Activity (2):** Help your child know the benefits of the cooperative work by letting him/her build a team to create a newspaper, then assign a task to each member.
- **Aim:** Collaborate with a group to produce a newspaper.
- **Subjects integration:**
  - **English:** Participate with peers to create a newspaper.
  - **Art:** Collaborate with peers to create an art exhibition.
- **Life Skills:** Collaboration - Communication - Self-management.





## Our Newspaper

**Activity 3**

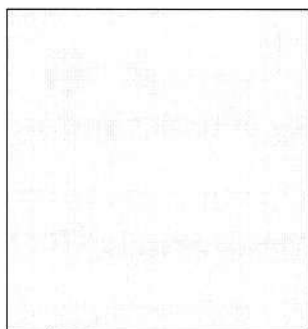
Write & stick pictures to fill the following forms in order to start your newspaper project:

**Newspaper name is** .....

### Interview Article Template

Headline: .....

By: .....



.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....



- **Parents' Tips: Activity (3):** Assist your child to complete his/her a newspaper project and let him/her decide the newspaper name with a group and write an interview article using the template above.
- **Aim:** Collaborate with a group to produce a newspaper.
- **Subjects integration:**
  - **English:** Participate with peers to create a newspaper.
  - **Art:** Collaborate with peers to create an art exhibition.
- **Life Skills:** Collaboration - Communication - Self-management.





## News/ Current Event Article Template

Headline: .....

By: .....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....



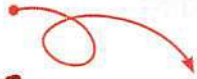
- **Parents' Tips:** Help your child review the characteristics of the event story, then let him/her write an event article using the template above.





## Advertisement Template

**Stick or  
draw Your  
Advertisement**

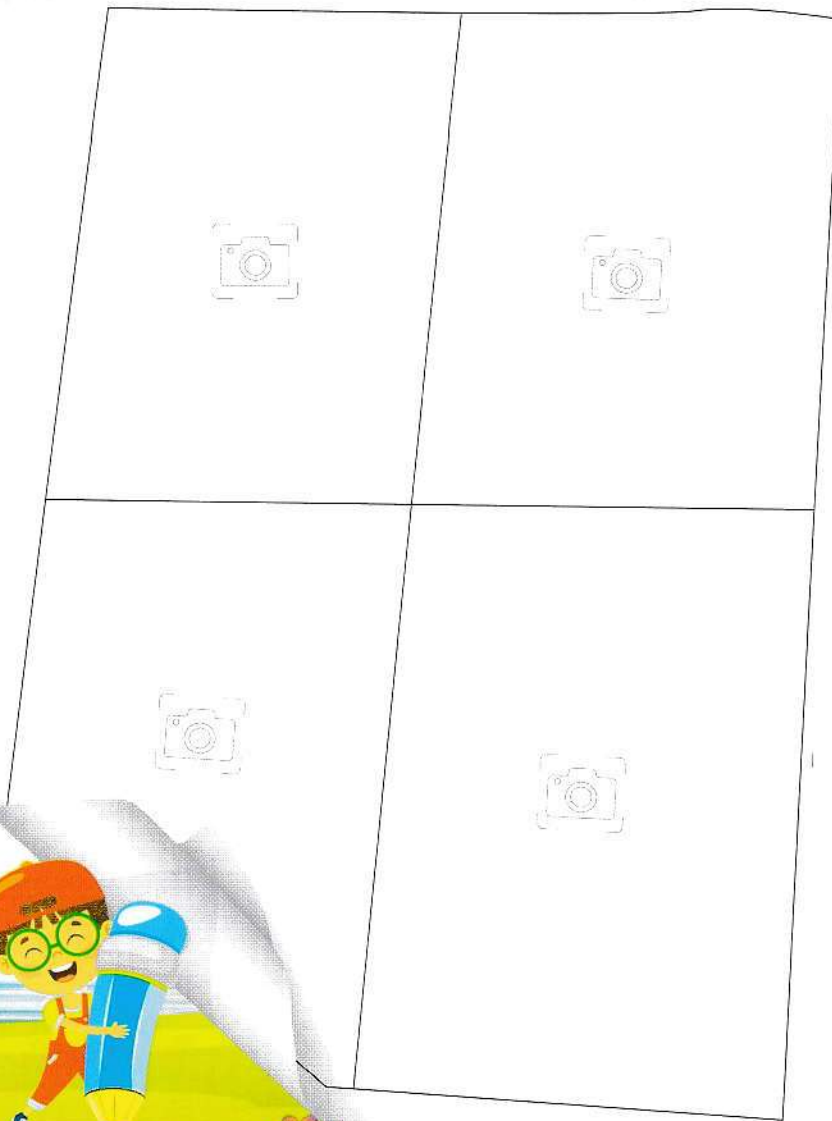


- **Parents' Tips:** Help your child review the characteristics of the advertisement, then let him/her create one using the template above.



## Cartoon Template

Stick or  
draw Your  
Panels



- **Parents' Tips:** Help your child review the characteristics of the cartoon, then let him/her create one using the template above.



# Lesson 8

## Mural Brainstorm

### Activity 1

**Read & follow the steps to design a mural about transportation:**



Art is another method we can use to share with the community, such as "Murals". A mural is a type of painting on a wall or a ceiling, it may exist in public places indoors or outdoors, and they are usually big in size. Let us see how we can plan to make a mural.

Topic

Transportation

Words come to mind

Symbols or drawings

Land



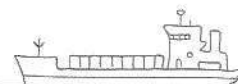
Car, Truck, Bus,  
Train, Bicycle



Water



Boat, Ship



Air



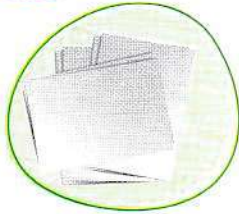
Airplane,  
Helicopter, Rocket



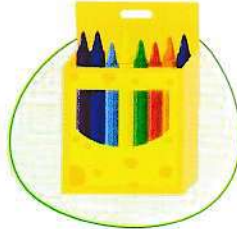
- **Parents' Tips: Activity (1):** Help your child read and understand the characteristics of a mural and calculate the area of a mural using individual panels.
- **Aim:** Analyze the characteristics of a mural.



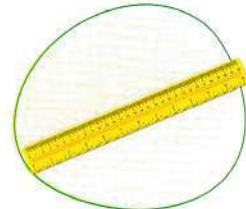
**Materials you will need**



4 white cardstock papers  
(30 cm x 20 cm each paper)



Crayons



Ruler

**The Mural**

20 cm  
20 cm

30 cm

30 cm

✳ From the given measurements, calculate the area of the above mural.

Area = ..... cm<sup>2</sup>.



○ **Subjects integration:**

- **English:** Ask and answer the questions to demonstrate understanding of the text.
- **Math:** Multiply side length to find areas of rectangles.
- **Art:** Collaborate with peers to create an art exhibition.

○ **Life Skills:** Communication - Collaboration.





## Activity 2 Create your own mural about "Birds":

Words come  
to mind

Birds

Symbols or  
drawings

Clouds



Sun



Trees



Birds



Nest



Food (worms/seeds)



The Mural



- **Parents' Tips: Activity (2):** Assist your child to create his /her mural about birds.
- **Aim:** Produce a panel for a bird mural.
- **Subjects integration:**
  - **English:** Ask and answer the questions to demonstrate understanding of the text.
  - **Art:** Collaborate with peers to create an art exhibition.
- **Life Skills:** Communication - Collaboration.

# Lesson 9

## "Our Mural Feedback"

### Activity

Let another student review the mural you created:

Reviewer's name: .....

I like your Mural because .....

- ☐ It's about an interesting topic.
- ☐ It's colorful.
- ☐ Drawings are detailed.
- ☐ Drawings are colored neatly.
- ☐ It helped share information with the community.
- ☐ There is a deeper meaning in your mural.



- **Parents' Tips: Activity:** Help your child review the mural of his/her classmate.
- **Aim:** Give effective feedback.
- **Subjects integration:**
  - **English:** Follow the "agreed-upon" rules of discussion.
- **Life Skills:** Respect for diversity.



Lesson  
**10**

# Project

"Make Your Mural"

Topic

Words come  
to mind

Symbols or  
drawings

1. ....



2. ....



3. ....



Determine  
Mural Area

Length =

Width =

Area =

Topic  
Message



**Tick (✓) the learning outcomes you have learned through the chapter:**

- ☐ Predict how newspaper helps people connect within community.
- ☐ Produce invitation to attend the share project.
- ☐ Identify elements of a news article.
- ☐ Write a news article about a member of the community.
- ☐ Collaborate with a group to produce a newspaper.
- ☐ Utilize strong opening and closing sentences in writing.
- ☐ Identify the characteristics of strong public service messages.
- ☐ Produce a four-panel cartoon to share information about a topic.
- ☐ Present mural panels to the community or class.





# Al-Adwaa

# Oasis



**Tell me about your favorite things:**

**Start**

Something I  
would like to  
learn

**Favorite  
movie**

Something  
I do to stay  
healthy

**Favorite  
sport**

**Favorite  
book**

**Favorite  
day of the  
week**

Something  
I would like  
to do

**Favorite  
food**

**Favorite  
pizza**

**Favorite  
season**

Something I  
am good at

Something  
I know  
about  
zebras

**Favorite type  
of cake**

**Something  
that makes  
me happy**

Something  
that makes  
me angry



**Favorite  
color**

**Favorite  
actor**

**Favorite  
movie**

Something  
I'm proud of

**Favorite  
relative**

Something  
that makes  
me sad

**Favorite  
fruit**



Something  
I know  
about Africa

**Favorite  
vegetable**

**Something  
I like about  
school**

**Favorite  
number**

Someone I  
like to spend  
time with

**Favorite  
animal**

**Favorite  
holiday**

**Favorite  
hobby**



**Favorite  
TV show**

**Favorite  
cartoon  
character**

**Something  
that makes  
me happy**

**Favorite  
activity to do  
in summer**

**Favorite  
snack**

Something  
I know about  
polar bears

**Finish**





Question words: (Choose the correct word):



..... do you live?

- In a house

- a. Why
- b. When
- c. Where
- d. Who



..... is your favorite hobby?

- a. What
- b. When
- c. Where
- d. Who



..... time does Tamer get up?

- a. Why
- b. What
- c. Where
- d. Who



..... is Mariam's nationality?

- Egyptian

- a. Why
- b. When
- c. Where
- d. What



..... are you going next weekend?

- a. Why
- b. When
- c. Where
- d. Who



..... time is it?

- Ten past ten

- a. Why
- b. What
- c. Where
- d. Who



..... color is that balloon?

- a. Why
- b. When
- c. What
- d. Who



..... does Sara work every summer?

- a. Why
- b. When
- c. Where
- d. Who



..... is dad doing?

- a. What
- b. When
- c. Where
- d. Who



..... is Amir watching on TV?

- a. What
- b. When
- c. Where
- d. Who



..... is he running?

- Because he's late.

- a. Why
- b. When
- c. Where
- d. Who





# DISCOVER

**Multidisciplinary**  
**Ongoing Assessment Booklet**

**Primary Three**  
**Second Term**

**Name :** .....

**Class :** .....




**School :** .....



# Content




## **Theme 3: How the World Works**

### **Origins**

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## **Theme 4 : Communication**

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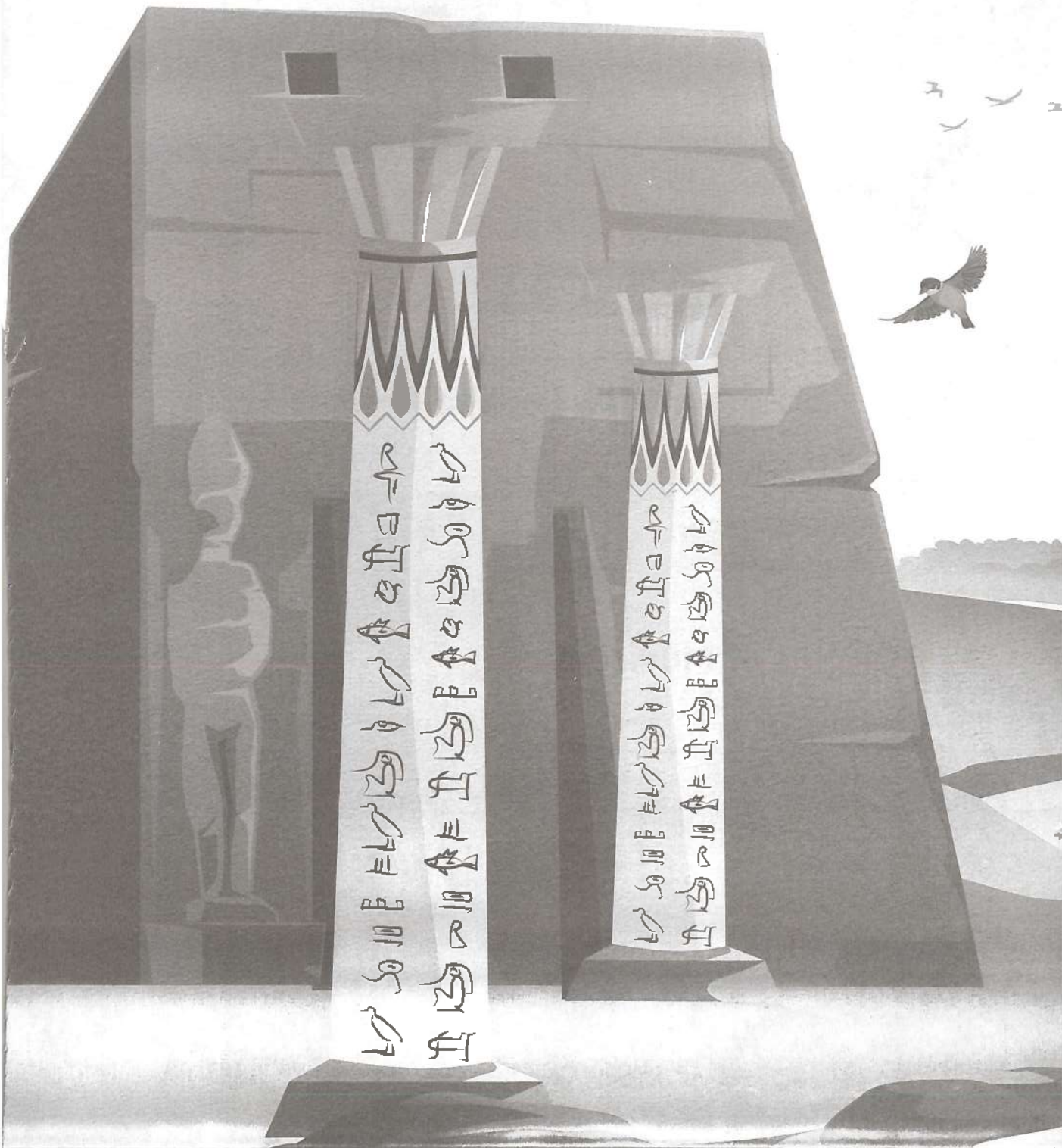


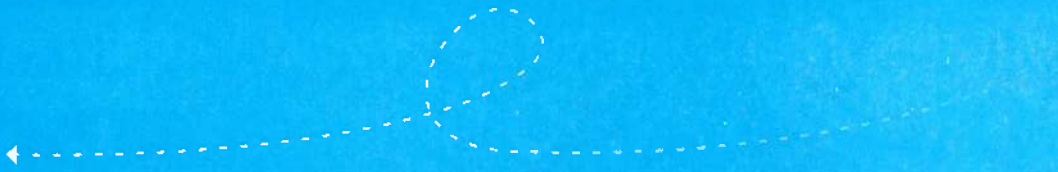


**THEME**

**3**

# How the World Works Origins





## Chapter 1

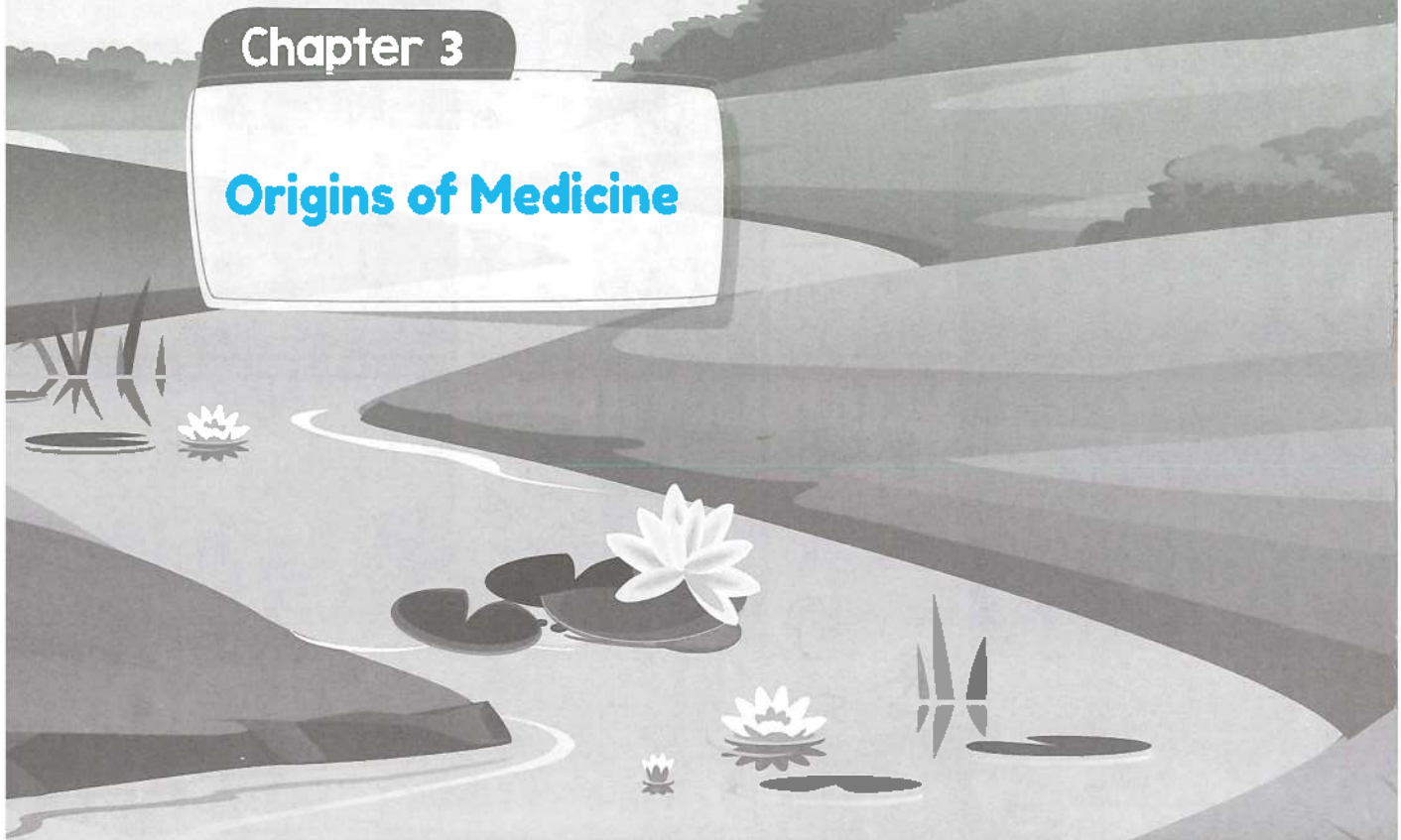
### Patterns of Change

## Chapter 2

### A New Look to Ancient Art

## Chapter 3

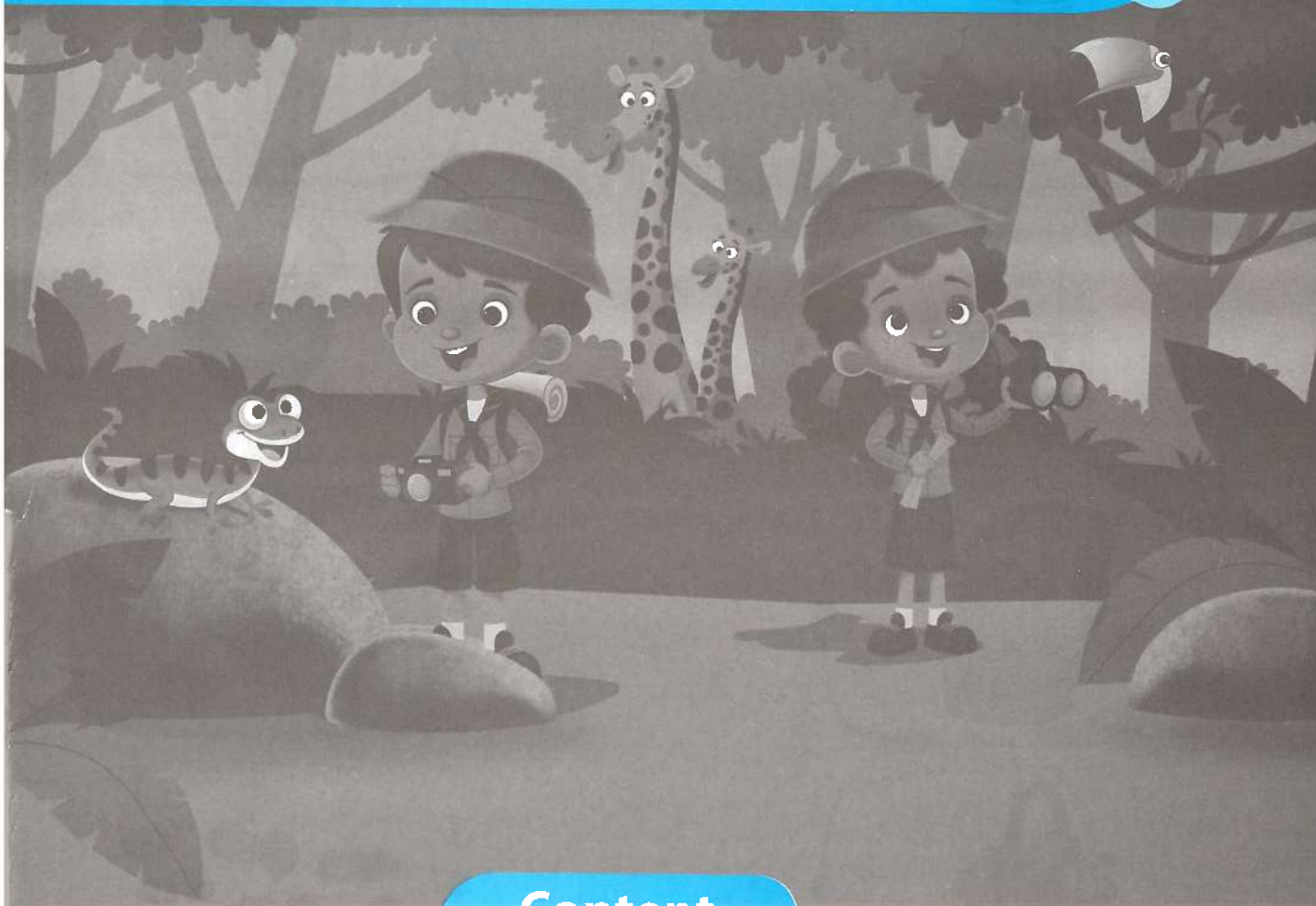
### Origins of Medicine







# "Patterns of Change"



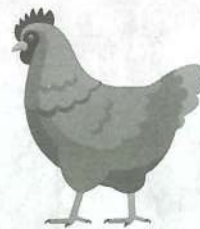
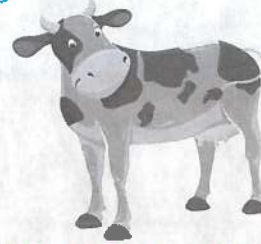
## Content

- 4 "Assessment Sheets" for more practice.
- An activity "Project".
- "Assess Your Progress".

# Sheet 1



Connect each food to its origin:







# Sheet 2

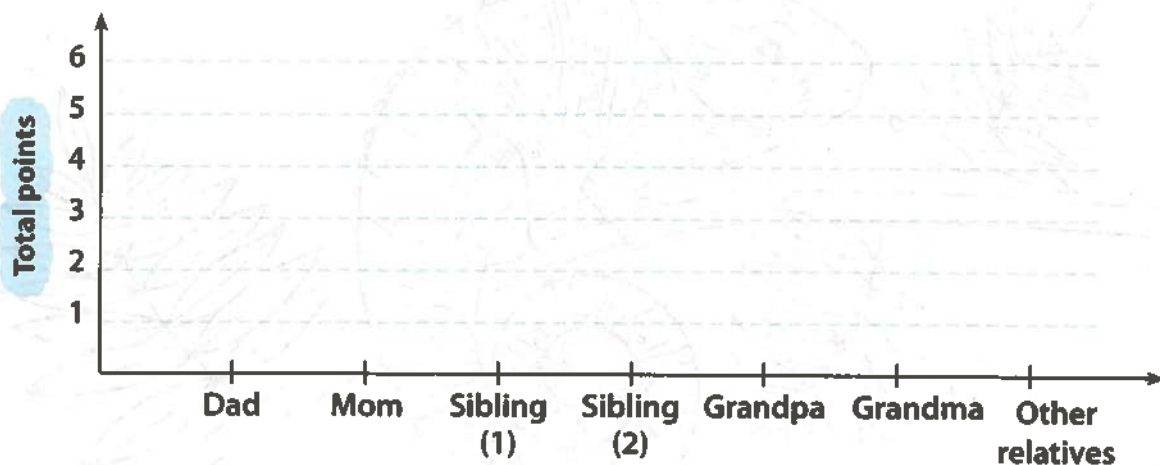


Tick (✓) the traits you have inherited from the given family members:

Traits	Dad	Mom	Sibling (1)	Sibling (2)	Grandpa	Grandma	Other relatives
1 Eye "Color"							
2 Hair "Color"							
3 Skin "Color"							
4 Height (Tall/short)							
5 Nose "Shape"							
6 Freckle							
Total points:							

\* I look like ..... the most.

Represent the "Total points" data for each family member using "Line plot" method:

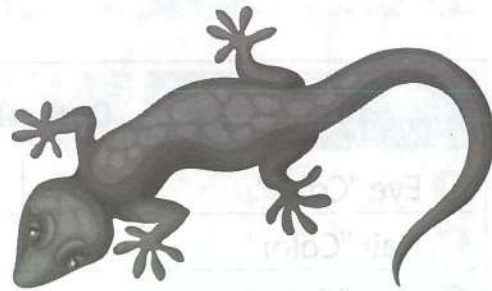


# Sheet 3

Tick (✓) the correct answer:

## 1. What is animal camouflage?

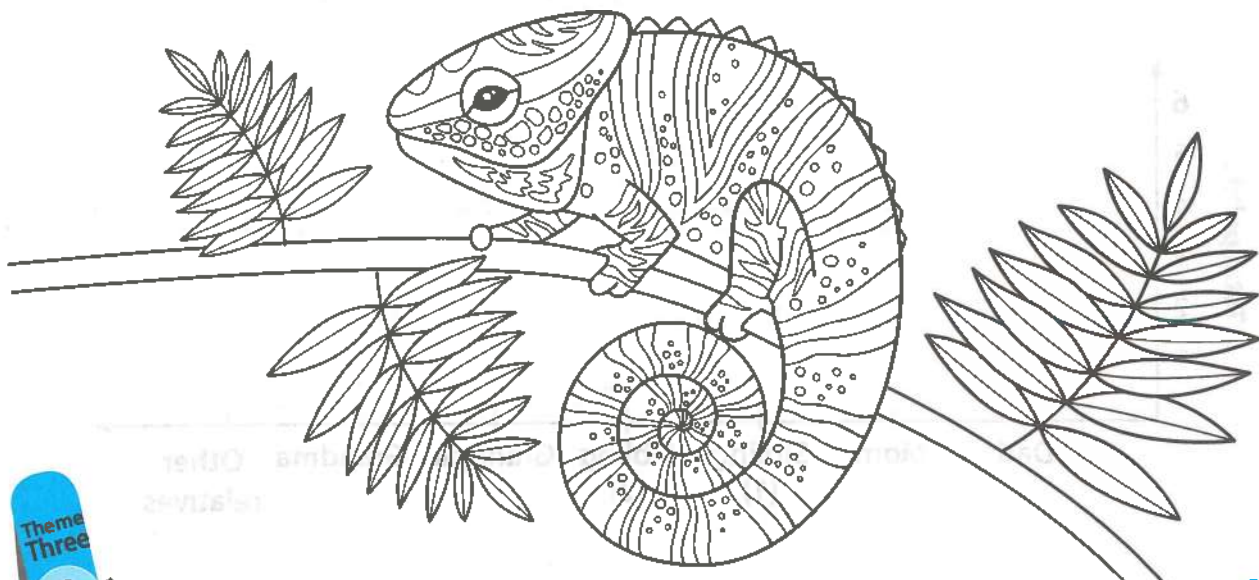
- ☐ The ability to blend into its surroundings.
- ☐ The ability to stand out.
- ☐ Clothing an animal wears to look different.



## 2. Why does an animal camouflage?

- ☐ To hide from predators.
- ☐ To be concealed from prey.
- ☐ All of the above.

Use your coloring pencils to camouflage the chameleon:







## Sheet 4



**Search for some facts about camels, then complete:**



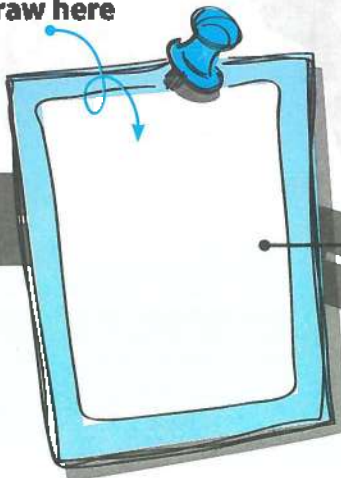
- 1** Camels live in .....
- 2** Camels have more than one stomach to .....  
.....
- 3** Camels have humps to .....  
.....
- 4** Baby camel is called .....
- 5** Camels have flat padded feet to .....  
.....
- 6** Camels have eyelashes to .....  
.....



# Project

**Predict your future for the next ten years, then draw your expectations how you will look like in each stage & complete the timeline:**

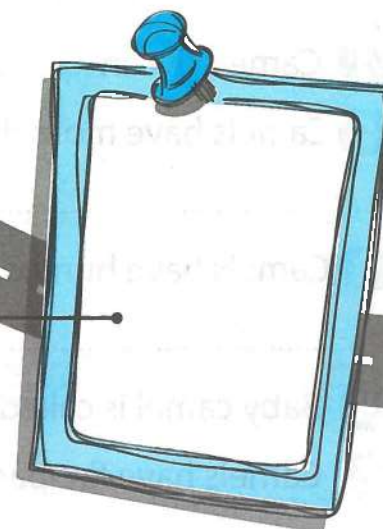
Draw here



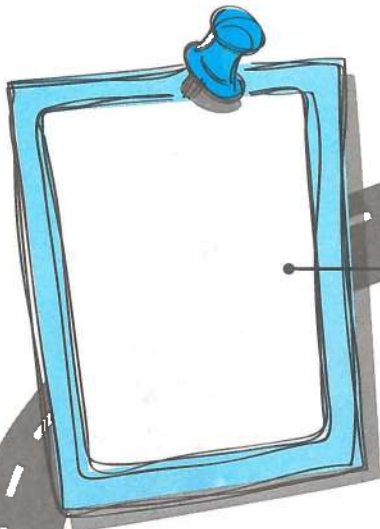
- \* I'm 8 years old.
- \* I'm in grade 3.
- \* I'm ..... cm tall.
- \* My favorite hobby is .....

**10 years old.**

- \* .....
- \* .....
- \* .....
- \* .....





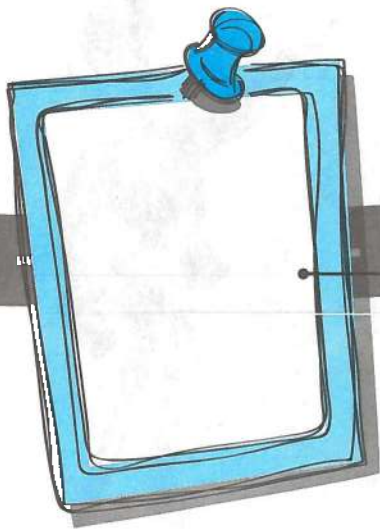
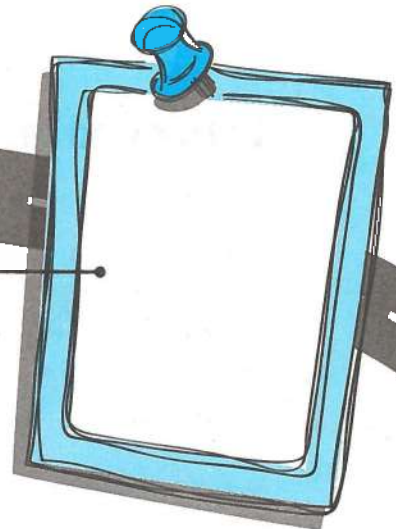


**18 years old.**

- \* .....
- \* .....
- \* .....
- \* .....

**14 years old.**

- \* .....
- \* .....
- \* .....
- \* .....



**12 years old.**

- \* .....
- \* .....
- \* .....
- \* .....





# Assess Your Progress

\* I understand my work.



\* I understand most of my work.



\* I need help, please.



I am good at:

.....  
.....  
.....

I need to improve:

.....  
.....  
.....

Teacher's comment



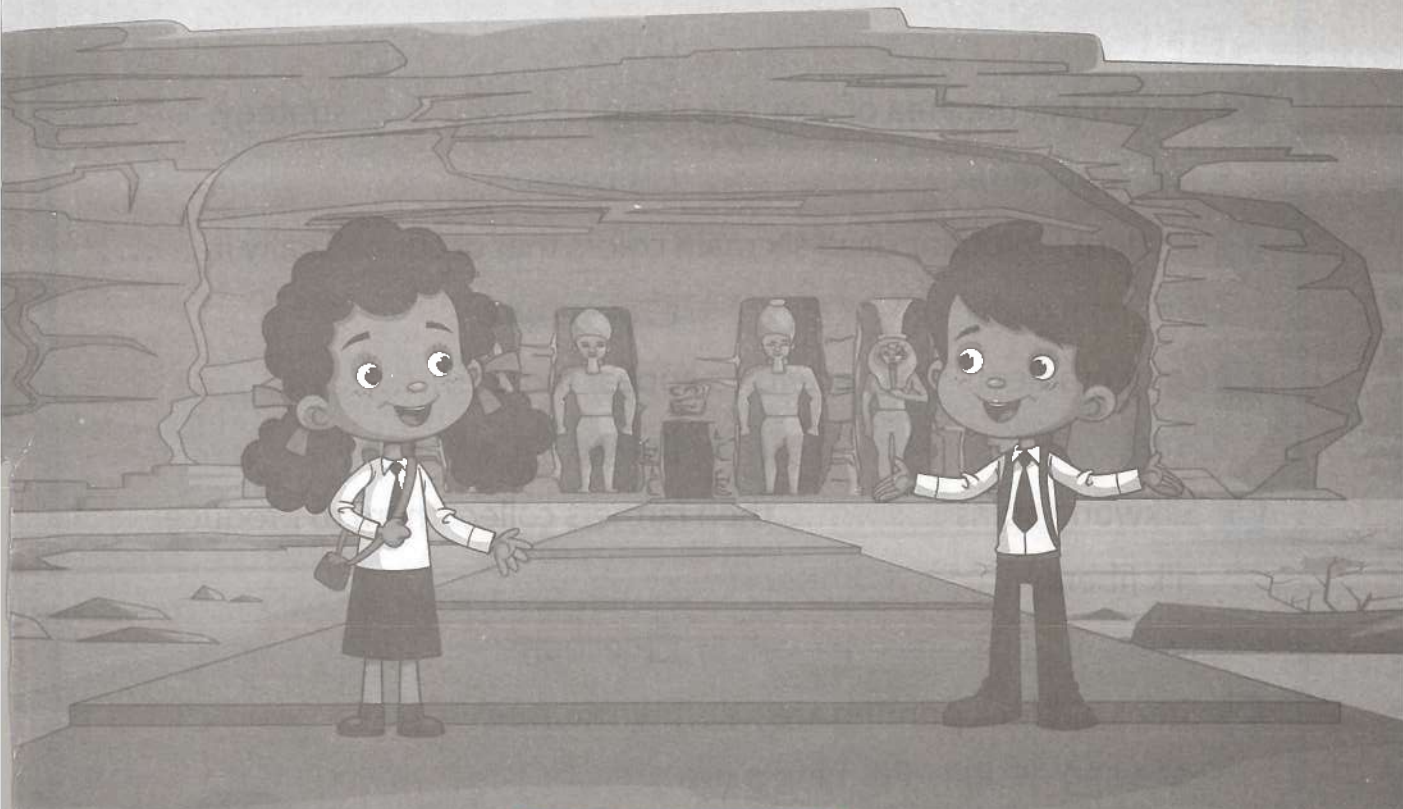
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# "A New Look to Ancient Art"

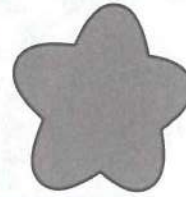


## Content

- 4 "Assessment Sheets" for more practice.
- An activity "Project".
- "Assess Your Progress".



# Sheet 1



**Tick (✓) the correct answer:**

- 1** Drama is a type of .....  
☐ art ☐ toys
- 2** We can get the area of a square using ..... strategy.  
☐ multiplication ☐ division
- 3** Ancient Egyptians used six main colors that occur naturally in .....  
☐ mineral rocks ☐ paint tubes
- 4** Color gradients make artworks appear more .....  
☐ real ☐ fake
- 5** Silkworm spins ....., then farmers collect them to produce silk fibers.  
☐ wool ☐ cocoon
- 6** Steps of block printing are .....  
☐ Craving design - Rubbing paint  
- Pressing on another surface  
☐ Rubbing paint - Craving design  
- Pressing on another surface







## Sheet 2



Tick (✓) "True" or "False":

**1** Art is not found around us.

☐ True

☐ False

**2** Math doesn't help artists to make their artworks.

☐ True

☐ False

**3** Clothing machines make cloth production faster.

☐ True

☐ False

**4** Climate doesn't affect the type of clothing.

☐ True

☐ False

**5** Modern musical instruments have an ancient origin.

☐ True

☐ False

**6** All sculptures are for real things.

☐ True

☐ False

**7** Arts don't change over time.

☐ True

☐ False

**8** Colors evoke our feelings; they can make us happy or sad.

☐ True

☐ False





## Sheet 3



Complete using the given words:

**abstract - adhesive - earth - music - warm - six -  
darker - rhombus**

- 1 Ancient Egyptian artists used ..... main colors in their artworks, these colors occur naturally in .....
- 2 While creating color gradient, if we pressed harder, the color gets .....
- 3 ..... is a quadrilateral geometric shape.
- 4 Heavy woolen clothes keep people .....
- 5 ..... and art reflect our feelings and what is happening in our life.
- 6 ..... substances stick materials together.
- 7 The Sphinx is a/an ..... sculpture.







## Sheet 4

**Underline the correct answer:**

- 1 ..... is a form of art.  
(Football - Canopic jar)
- 2 Ancient Egyptians used ..... in architecture.  
(geometric shapes - computers)
- 3 Wool is made from .....  
(cotton plant - sheep)
- 4 To be a good member in my group, I have to .....  
(communicate my ideas - be selfish)
- 5 ..... is the appearance of a place, its structure and decorations.  
(Scenery - Prop)

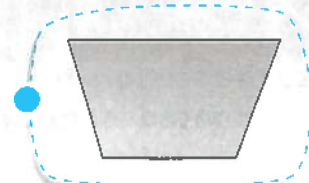
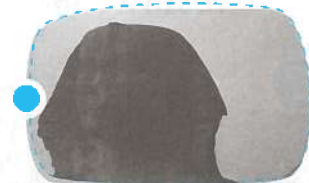
**Match:**

Orpiment

Ancient sculpture

Trapezium

Modern musical tools



# Project

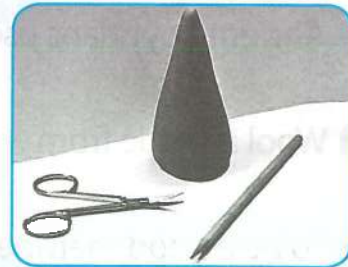
## Let's Decorate

- ★ Let's create a "Christmas Tree" to use it in the next New Year's Eve decorations.

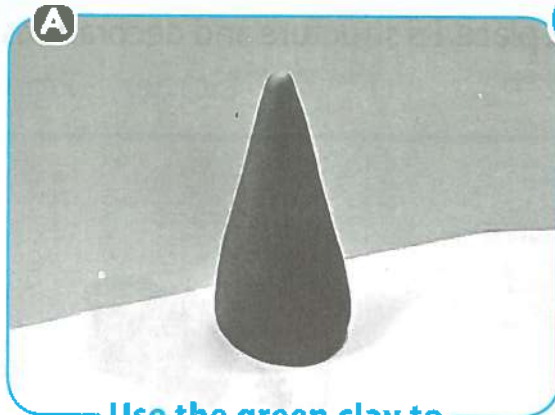
### "Christmas Tree"

#### Tools:

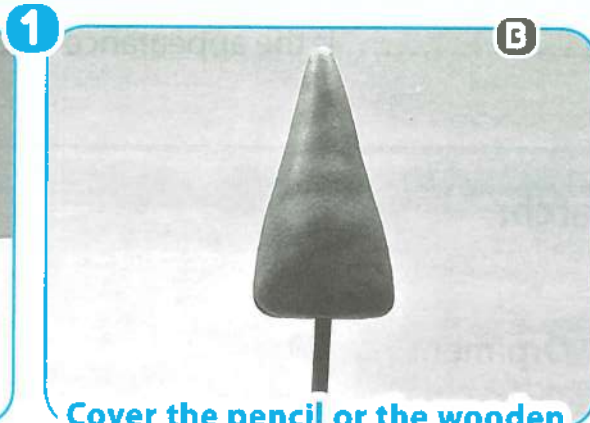
- 1 Green and brown polymer clay.
- 2 Scissors.
- 3 Pencil or Wooden stick.



#### Steps:



Use the green clay to create a cone shape.



Cover the pencil or the wooden stick with the brown clay, then insert it into the cone base.



Use the scissors to make equally spaced identical cuts.



Gently curl each cut to give the tree a realistic appearance.



**4** Draw or stick a picture of your tree:



## Assess Your Progress

\* I understand my work.

\* I understand most of my work.

\* I need help, please.



I am good at:

.....

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I need to improve:

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Teacher's comment



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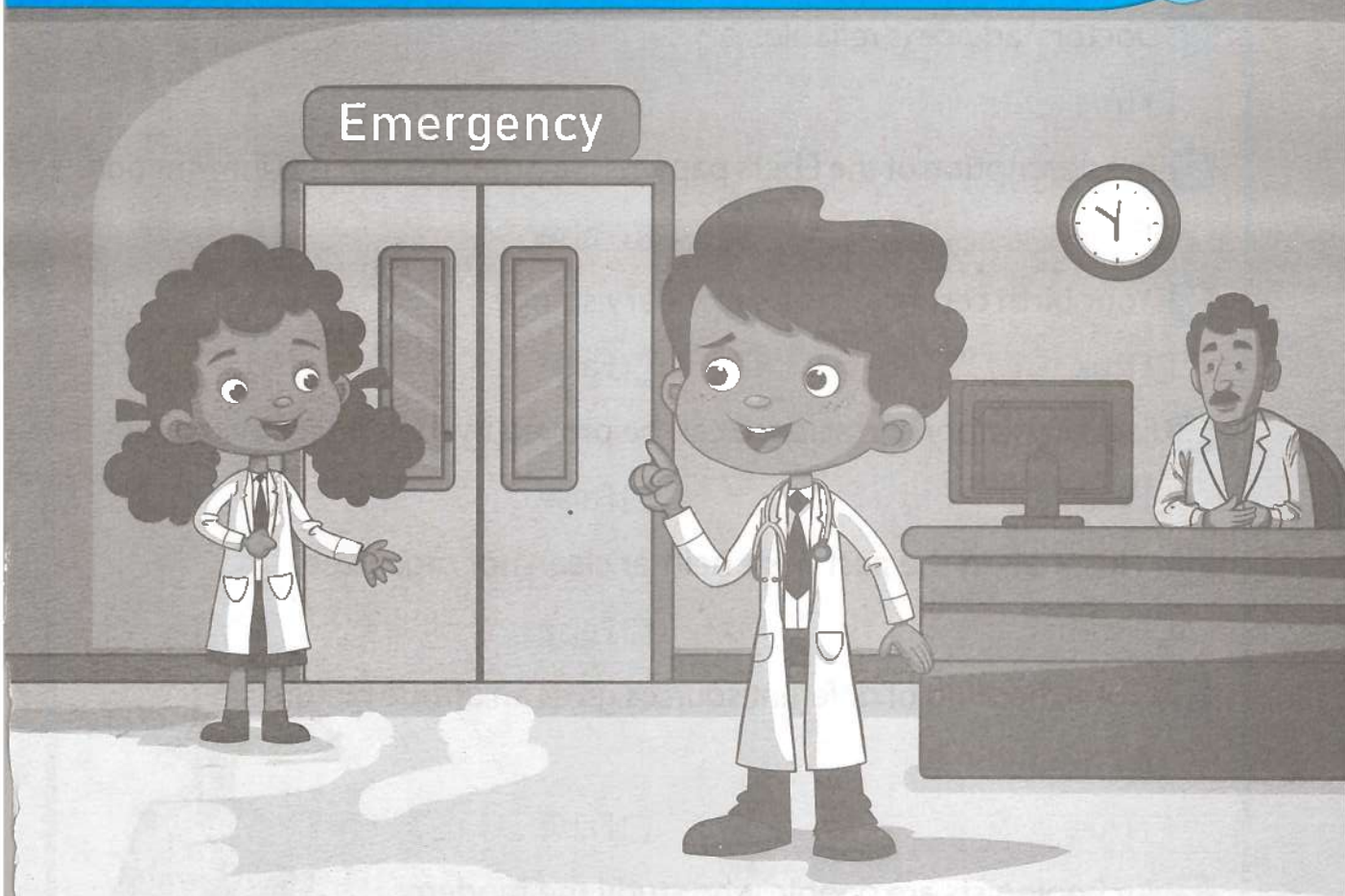




## CHAPTER 3



# "Origins of Medicine"



## Content

- 4 "Assessment Sheets" for more practice.
- An activity "Project".
- "Assess Your Progress".

## Sheet 1



Tick (✓) "True" or "False":

- 1 Doctors' advice is reliable.  
☐ True ☐ False
- 2 The description of the Ebers papyrus is a primary source of information.  
☐ True ☐ False
- 3 Your birth certificate is a secondary source.  
☐ True ☐ False
- 4 Facts in history and science can be proved by looking for evidence.  
☐ True ☐ False
- 5 Hospitals in the past were neither clean nor organized.  
☐ True ☐ False
- 6 Cross-checking of different sources gives an untrue picture for history.  
☐ True ☐ False
- 7 Archeologists are people who study the modern artifacts only.  
☐ True ☐ False







## Sheet 2



**Complete using the given words:**

**mansuri hospital - fever - hospital - universities  
- modern equipment - blood pressure cuff  
- germs - fact**

- 1** Eating healthy food makes your body strong. This is a .....
- 2** Unclean hands spread .....
- 3** ..... was the largest hospital in Cairo in 1248 CE.
- 4** ..... is the place where doctors, nurses and other specialists are trained to take care of you.
- 5** ..... is used to measure how hard your heart is pumping.
- 6** When the body temperature is higher than normal, that may be a sign of a/an .....
- 7** Modern hospitals partner with .....
- 8** Scientists examined ancient mummies using X-rays and other .....

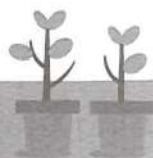


## Sheet 3



Tick (✓) the correct answer:

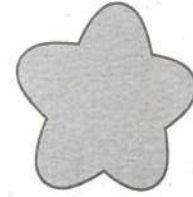
- 1 Fact is a/an ..... statement that can be proved.  
☐ true ☐ untrue
- 2 ..... described Imhotep's contributions to medicine.  
☐ The Eber papyrus ☐ Edwin Smith papyrus
- 3 Cross-checking gives ..... picture of history.  
☐ a fake ☐ a reliable
- 4 Encyclopedias are considered as a ..... source.  
☐ primary ☐ secondary
- 5 The Great Library of Alexandria served people from ..... cultures.  
☐ the same ☐ different
- 6 Modern hospitals serve ..... patients than older ones.  
☐ more ☐ fewer
- 7 Orphanages were found in ..... hospitals.  
☐ modern ☐ old
- 8 ..... is used to look into ears.  
☐ Thermometer ☐ Otoscope







## Sheet 4



Complete the tables:

	Fact	Fiction	Opinion
Example	.....	.....	.....

	Ebers Papyrus	Edwin Smith Papyrus
Common point of comparison	..... .....	..... .....

	Old Hospital	Modern Hospital
Date of opening	..... .....	..... .....



# Project



Search about the given ancient scientists in medicine:

## Ibn Sina "Avicenna"

**Born:** .....

**Died:** .....

**From:** .....

**Contributions:** .....

.....

**Books:** .....

.....



## Abu Bakr Al-Razi

**Born:** .....

**Died:** .....

**From:** .....

**Contributions:** .....

.....

**Books:** .....

.....



Ancient





# Scientists

## Ibn Al-Nafis



**Born:** .....  
**Died:** .....  
**From:** .....  
**Contributions:** .....

**Books:** .....  
.....

## Ibn Al-Haytham



**Born:** .....  
**Died:** .....  
**From:** .....  
**Contributions:** .....

**Books:** .....  
.....

# Assess Your Progress

\* I understand my work.



\* I understand most of my work.



\* I need help, please.



**I am good at:**

.....

.....

.....

**I need to improve:**

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**Teacher's comment**

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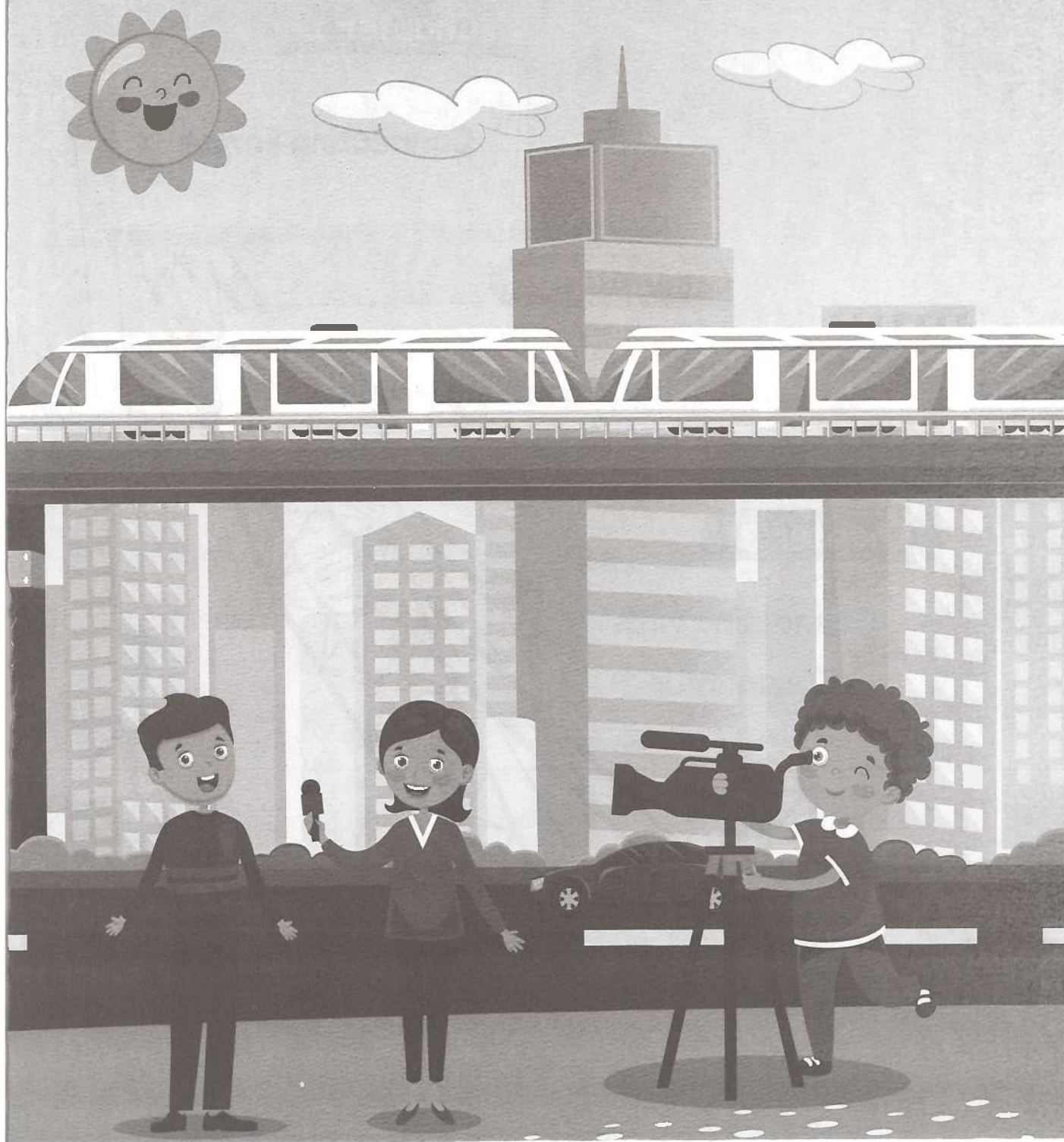




THEME

4

# Communication Connections





## Chapter 1

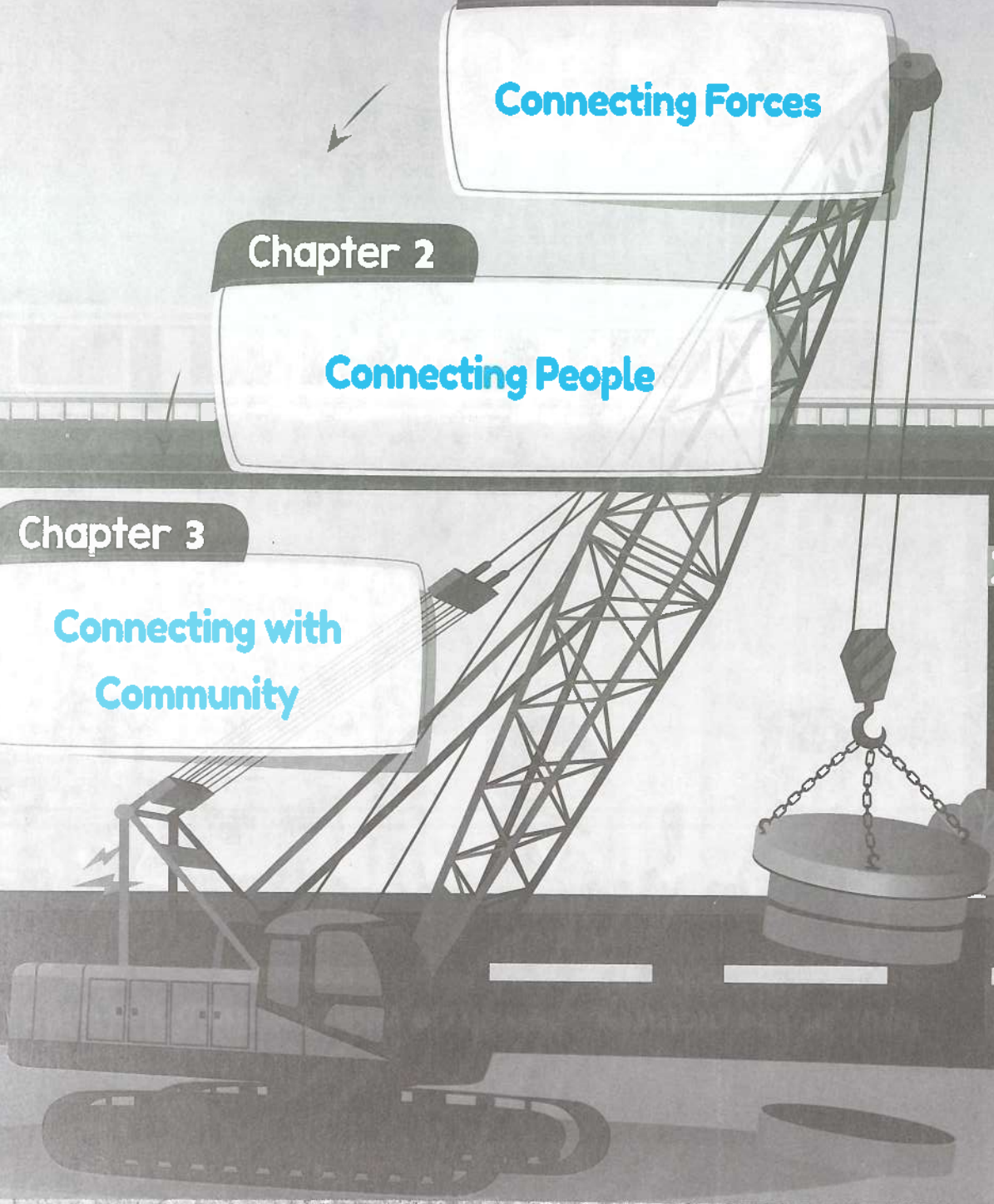
### Connecting Forces

## Chapter 2

### Connecting People

## Chapter 3

### Connecting with Community







# "Connecting Forces"



## Content

- 4 "Assessment Sheets" for more practice.
- An activity "Project".
- "Assess Your Progress".



## Sheet 1



Tick (✓) the correct answer:

1 ..... is an object or a person moving from one place to another.

☐ Pull☐ Push☐ Motion

2 What must be applied to push or pull an object?

☐ Force☐ Energy☐ Gravity

3 What type of force is this boy applying?

☐ Pull☐ Push

4 What type of force is this boy applying?

☐ Pull☐ Push

5 If we use more force to push something, it will move.....

☐ farther☐ closer













## Sheet 2



Color the circles in "Green" for Magnetic materials, and in "Red" for Non-magnetic materials:

Object	Magnetic	Non-magnetic
 Paper clip	<input type="radio"/>	<input type="radio"/>
 Building brick	<input type="radio"/>	<input type="radio"/>
 Ruler	<input type="radio"/>	<input type="radio"/>
 Coin	<input type="radio"/>	<input type="radio"/>
 Nail	<input type="radio"/>	<input type="radio"/>
 Scissors	<input type="radio"/>	<input type="radio"/>
 Pencil	<input type="radio"/>	<input type="radio"/>
 Book	<input type="radio"/>	<input type="radio"/>

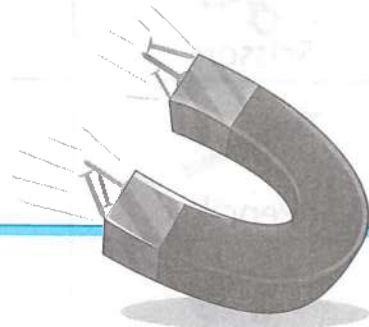


## Sheet 3

Complete using the given words:

south – iron – iron filings – north –  
repel – magnetism – attract

- 1 Magnet attracts .....
- 2 A magnet has ..... and ..... poles.
- 3 Unlike poles ..... each other.
- 4 Like poles ..... each other.
- 5 We can use ..... to detect the magnetic field around a magnet.
- 6 ..... is the force that allows the magnet to attract magnetic materials.



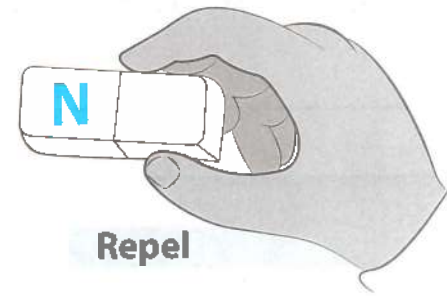
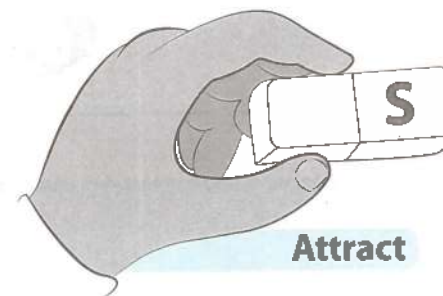
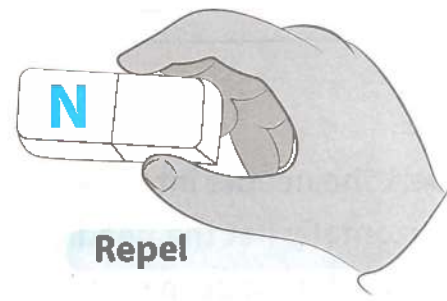
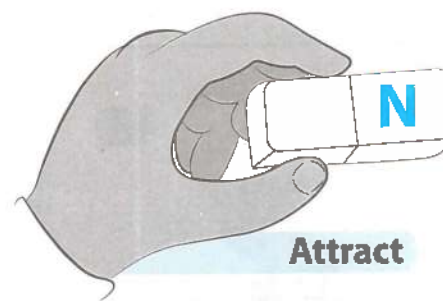
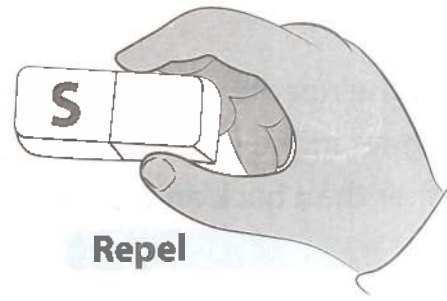
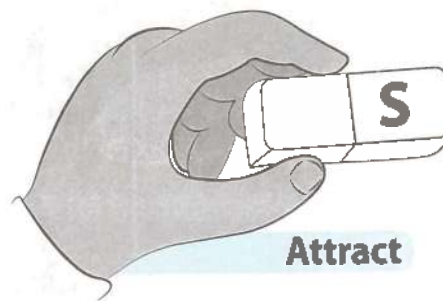
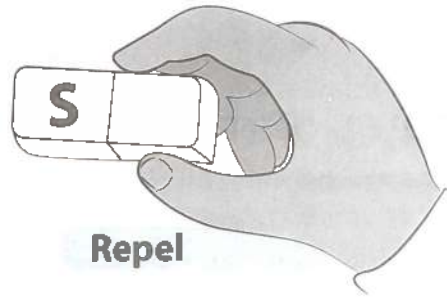
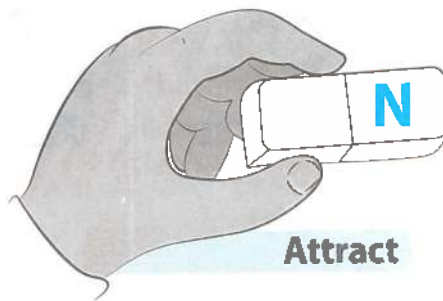




## Sheet 4



Look at the pictures, then circle whether the poles will attract or repel in each case:



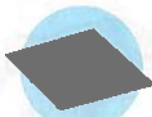
# Project

## "Make a Model of Compass"

### Tools:



Needle



Magnet



Cork



Bowl of water

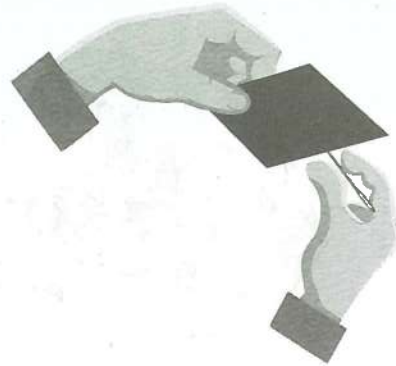


Pen

### Steps:

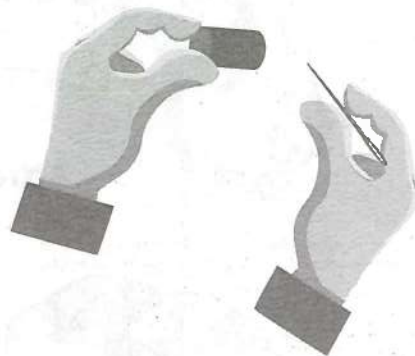
1

Rub the needle with the magnet in the same direction, rather than back and forth.



2

Insert the needle into the cork horizontally (let the needle come out from both sides equally) to make the compass.





3

Drop the compass to float on the water surface.



4

Leave the piece of cork (compass) till it stops moving.



5

Use the pen to mark both sides of the compass (North & South) to be able to use it to navigate the directions.



# Assess Your Progress

\* I understand my work.

\* I understand most of my work.

\* I need help, please.



I am good at:

.....  
.....  
.....

I need to improve:

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Teacher's comment



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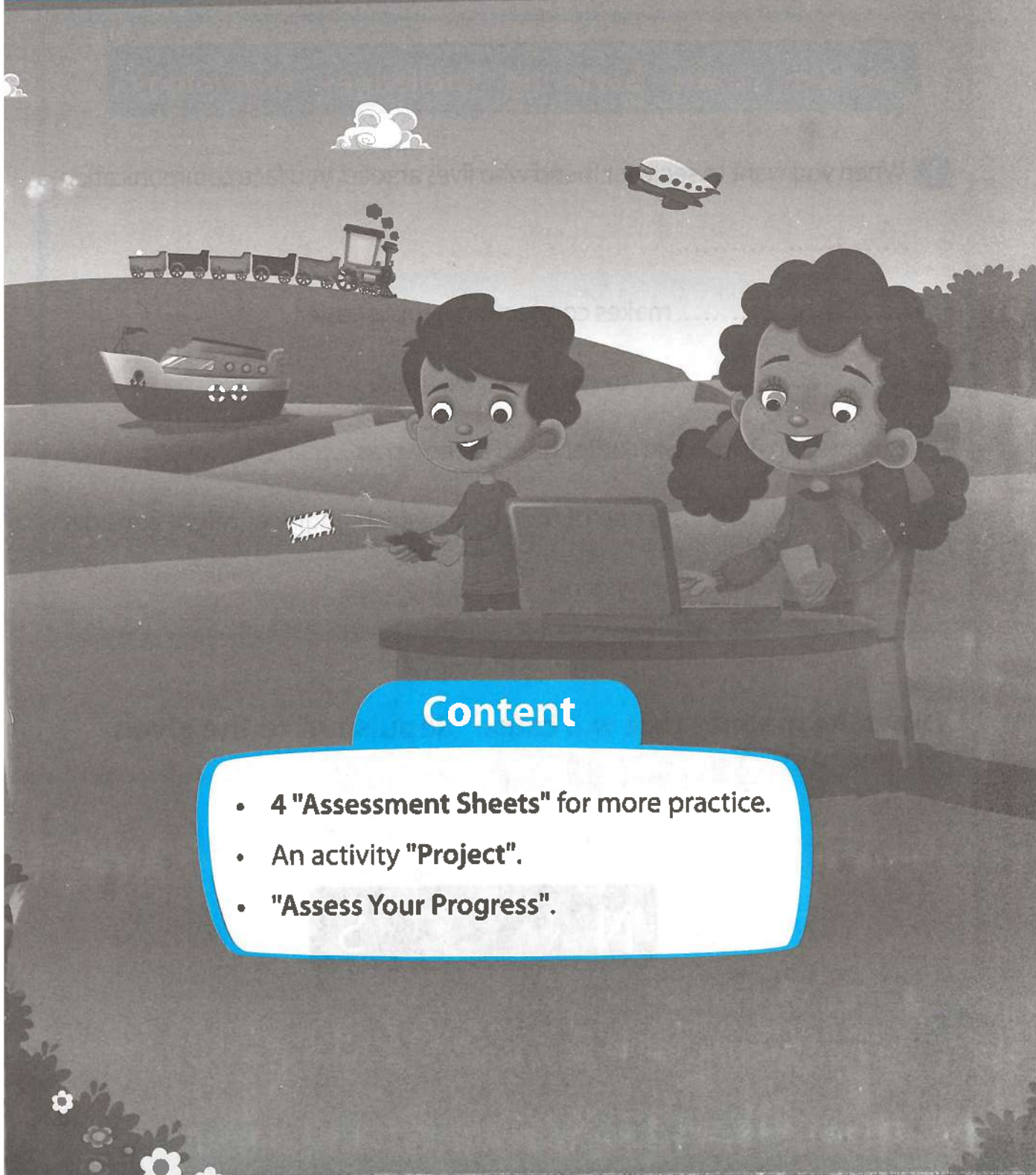






## CHAPTER 2

# "Connecting People"



### Content

- 4 "Assessment Sheets" for more practice.
- An activity "Project".
- "Assess Your Progress".

**Sheet 1**

**Complete using the given words:**

**location - trade - bartering - challenges - technology**

- 1 When you want to see your friend who lives abroad, you face communication .....
- 2 ..... makes connecting people easier.
- 3 We ..... to get goods we need.
- 4 Exchanging goods with other good is known as .....
- 5 ..... is one of the factors which engineer might consider to design transportation system.

**Draw the magnet that will cause "Repulsion" to the given magnet:**

**N****S**





## Sheet 2



Tick (✓) the correct answer:

**1** Factors which engineers use for designing transportation system.

- ☐ Shape of people      ☐ Number of people

**2** The brain of computer that follows orders and processes information.

- ☐ (CPU)      ☐ Motherboard

**3** Electric cars ..... time.

- ☐ save      ☐ waste

**4** ..... stores data for short time in the computer.

- ☐ Storage      ☐ Memory

**5** Buying and selling goods is known as .....

- ☐ trading      ☐ communication



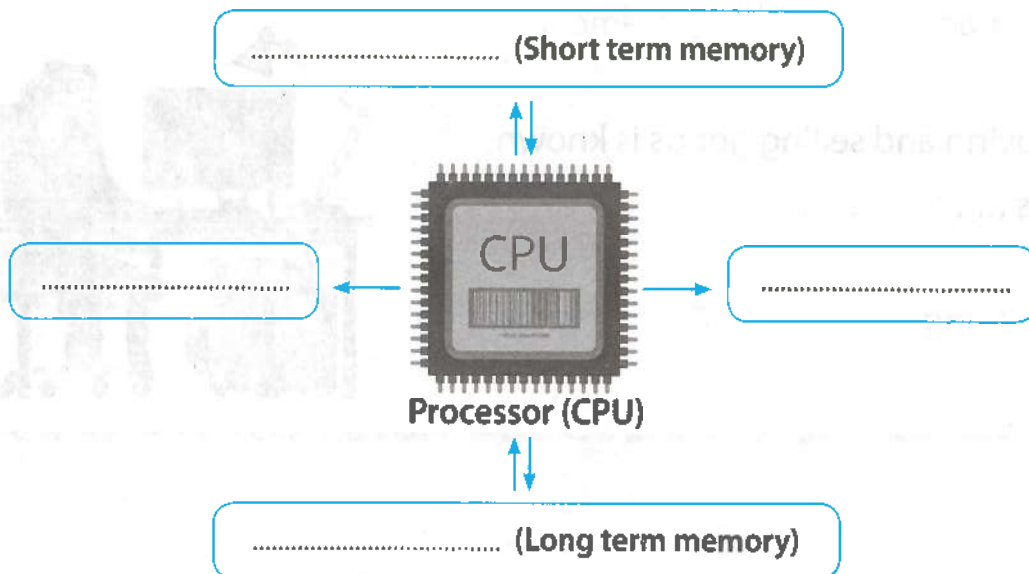
## Sheet 3

Tick (✓) "True" or "False":

- 1 We need transportation to make greater effort to reach a certain place.  
☐ True ☐ False
- 2 The less usage of fuel is one of the advantages of hyperloop train.  
☐ True ☐ False
- 3 Maglev train cost is economic.  
☐ True ☐ False
- 4 Keyboard is one of the computer parts which helps us to get data.  
☐ True ☐ False
- 5 Using the internet all the time strengthens family/friends communication.  
☐ True ☐ False



Search to complete the sequence of the computer parts process:







## Sheet 4



**Read the given information about the shown place, then answer the questions:**



- \* This area has a sea view.
- \* This area is occupied by a large number of people of different nationalities.
- \* The nearest city to this area lies thousands of kilometers away.

**1** Circle the suitable means of transportation which allows people to move across the sea.

a- Cars

b- Ships

c- Trains

d- Airplanes

**2** From the previous text, write the factor(s) that help(s) you choose the suitable means of transportation.

**3** Write other factor(s) which engineers consider to design the transportation system.



# Project

## Making a magnet-powered vehicle

### Tools:



Plastic car



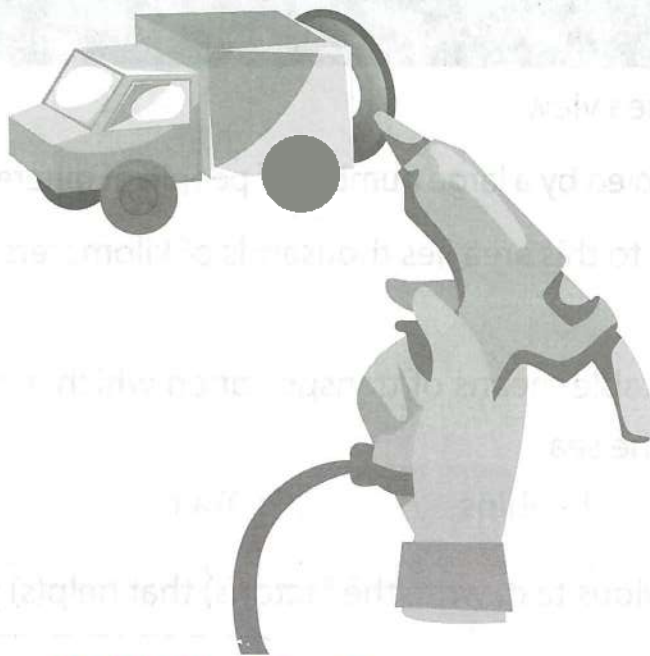
Glue gun



Two circular magnets

### Steps:

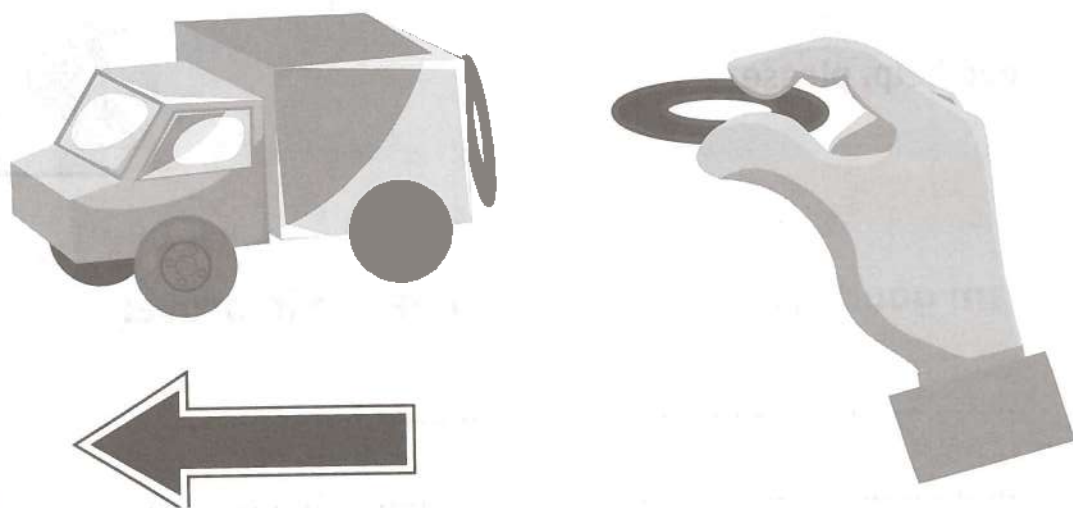
1



**Stick the circular magnet  
to the back of the plastic car  
using the glue gun.**



2



**Approach the other circular magnet to the magnet attached to the plastic car. (like poles)**

**The car will move forward due to the effect of the repulsion force.**

# Assess Your Progress

\* I understand my work.



\* I understand most of my work.



\* I need help, please.



I am good at:

.....  
.....  
.....

I need to improve:

.....  
.....  
.....

Teacher's comment



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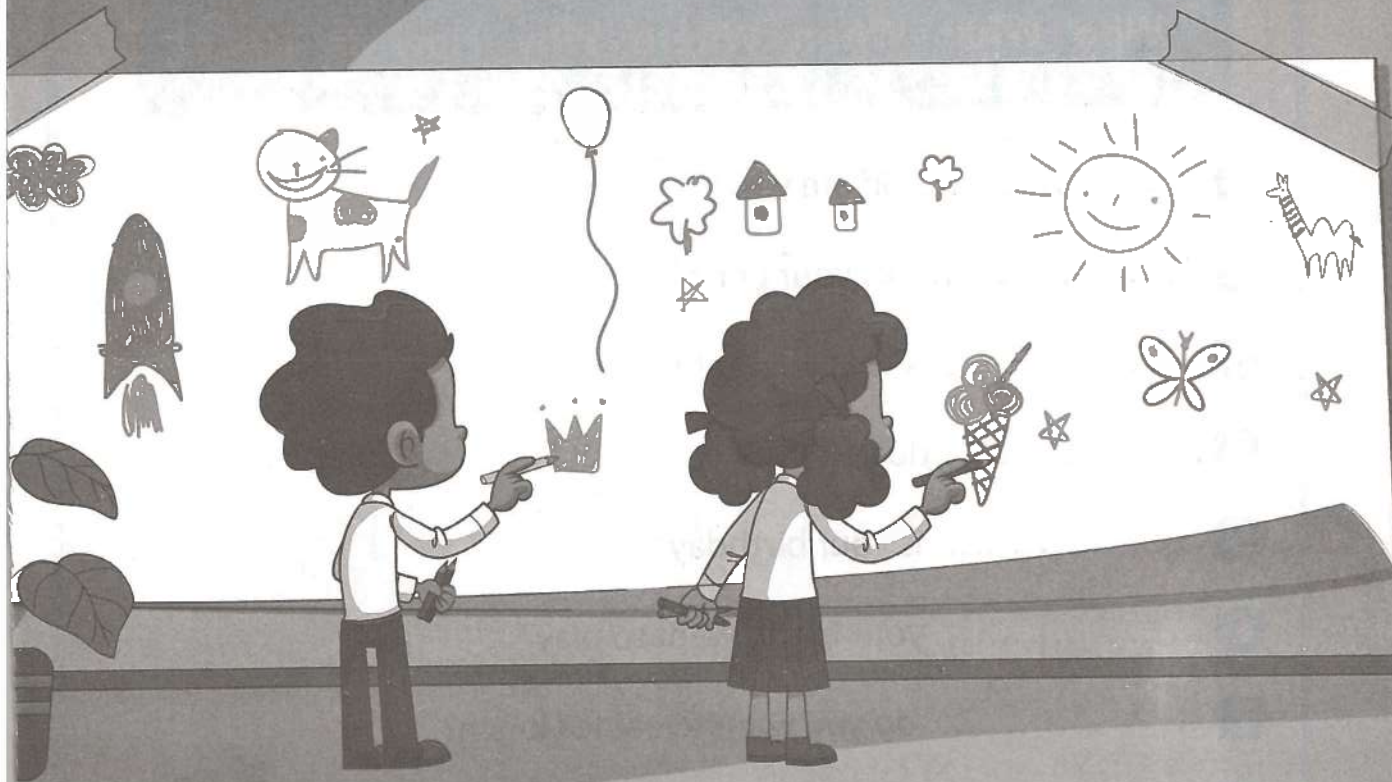


CHAPTER

3



# "Connecting with Community"



## Content

- 4 "Assessment Sheets" for more practice.
- An activity "Project".
- "Assess Your Progress".



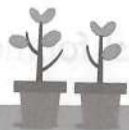
## Sheet 1



Complete using the given words:

Who - What - When - Where - Why - How - Is - Does

- 1 ..... old are you?
- 2 ..... this your pencil?
- 3 ..... sits at your table?
- 4 ..... do you live?
- 5 ..... is your birthday?
- 6 ..... your friend want to play?
- 7 ..... do you want to eat for lunch?
- 8 ..... are you crying?



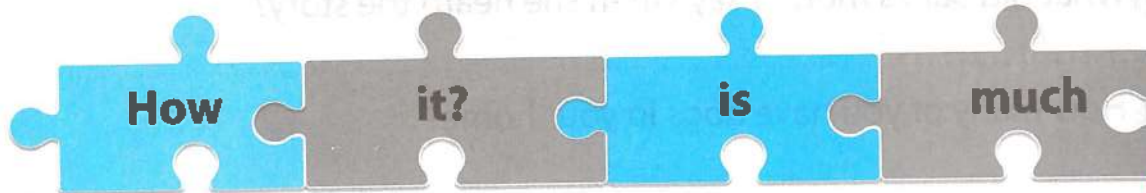
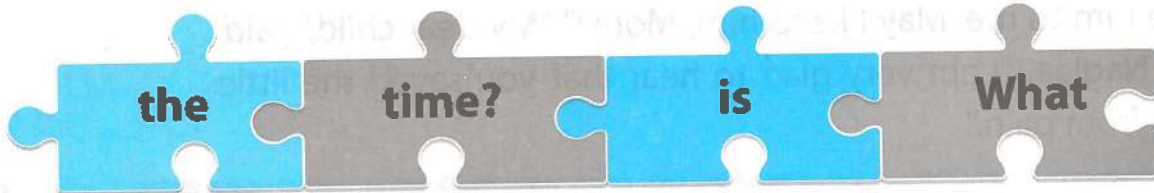
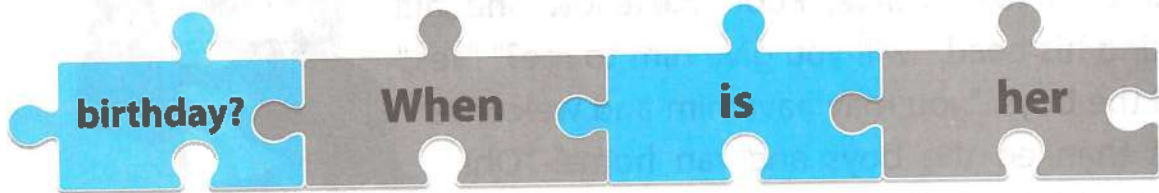
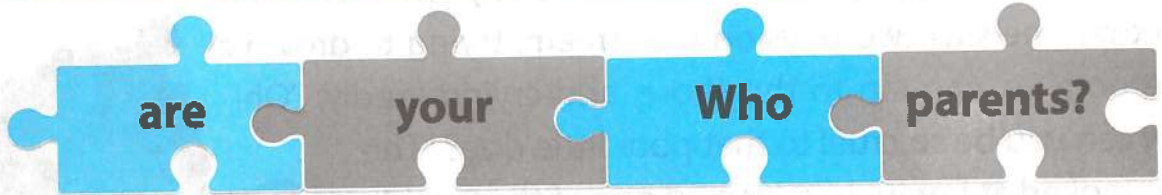




## Sheet 2



Arrange the words to form questions:





## Sheet 3



### Read the story, then answer:

Sara was a kind-hearted girl, and one day when crossing a bridge, she saw two boys on the stream, trying to drown a little dog. So, she ran to the shore, and crying loudly, "Oh! How can you be so cruel to that poor little dog?" The boys looked at her in wonder, and one of them said, "Father told us to drown it." The dog had reached the bank, crept toward Sara, "Poor little fellow," she said, patting his head, "will you give him to me?" "Yes," said the boys, "you may have him and welcome." Sara thanked the boys and ran home. "Oh! Mom," she cried, "look at this dear little dog; two boys were trying to drown him and I asked them to give him to me. May I keep him, Mom?" "My dear child," said Ms. Naglaa, "I am very glad to hear that you saved the little dog from pain."



1 What did Sara see when she was crossing the bridge?

.....

2 Why did the boys drown the little dog in the stream?

.....

3 Did the boys give the dog to Sara?

.....

4 What did Sara's mother say when she heard the story?

.....

5 How many of you have dogs in your home?

.....







## Sheet 4



Read, then answer:

Hello! My name is Max and I am eleven years old. My favorite activity is to ski. I like doing this activity because it's fun and I love spending time outdoors, I do ski with my parents and with my best friend Tom. I ski on weekends during winter. I ski at Val Neigette Ski Resort. I live in Sainte-Blandine and it's very close to this ski resort. When I ski, I feel really cool, relaxed and happy.



1 **Who** does he like doing this activity with?

.....

2 **How** does he feel when he does this activity?

.....

3 **Why** does he like this activity?

.....

4 **What** is his favorite activity?

.....

5 **Where** does he do this activity?

.....

6 **When** does he do this activity?

.....



# Project

## "All about Me"

My name

\_\_\_\_\_

This is me



Stick your image

I am



years old

I live in

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



My friends are ...

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_





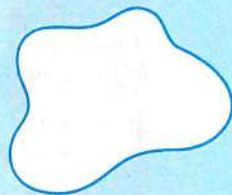
**This is my family**



**I want to be a**

**when I grow up**

**My favorite...**



**COLOR**



**FOOD**



**TV SHOW**



**BOOK**



# Assess Your Progress

\* I understand my work.



\* I understand most of my work.



\* I need help, please.



I am good at:

.....

.....

.....

I need to improve:

.....

.....

.....

Teacher's comment

.....

.....

.....

.....





# Notes

A large rectangular area with a light blue border, containing 20 horizontal dotted lines for writing notes.

رقم الإيداع: ٢٠٢١/١٥٥٢

